

A
PRACTICAL TREATISE
ON
VENEREAL DISEASES;
OR,
CRITICAL AND EXPERIMENTAL RESEARCHES
ON INOCULATION,
APPLIED TO THE STUDY OF THESE AFFECTIONS,
WITH A

THERAPEUTICAL SUMMARY AND SPECIAL FORMULARY.

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TRANSLATED FROM THE FRENCH,

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TRANSLATOR'S PREFACE.

IN preparing the following translation of M. Ricord's work, I have been stimulated by the following motives. First, to present to those medical men, who have not the advantage of being able to read the original, a faithful translation of a work of so acknowledged a merit. Secondly, to enable the English student, who may visit Paris, more immediately to follow the lectures of M. Ricord; having myself experienced the difficulty attending the study of the somewhat peculiar style in which the work is written, and knowing that few have had the opportunity of acquiring a sufficient knowledge of the French language, previous to visiting France.

It has been my object to adhere as nearly as possible to the original, and should the style be considered defective, I must appeal to the forbearance of the public, and only plead, in my justification, the peculiar idiom employed by our author, which all who have heard his lectures will easily appreciate.

It will be perceived, that I have throughout translated M. Ricord's term "blennorrhagie," by gonorrhœa. This may, I am well aware, appear to some objectionable, but as M. Ricord makes do distinction between it, and simple leucorrhœa, I did not think myself called upon to adhere to this term, more especially as I was desirous of rendering the work intelligible to junior students, as well as to those better acquainted with foreign literature.

I have omitted several of the cases contained in the original, particularly amongst those relating to the inoculation of the pus of buboes, as many were precisely similar in all the details, and would only have proved tedious to the reader. I feel myself however bound to state it, as M. Ricord might otherwise be accused of drawing his conclusions, from too scanty a number of observations.

AUTHOR'S PREFACE.

THE various motives which induce men to write, do not allow us to place on an equal degree of confidence all of them. The truth of this assertion is incontestible as regards the history of sciences in general, but more particularly in that which is about to occupy our attention in the following pages. If we survey the works which we already possess on the inoculation of venereal diseases, we shall soon find that either the interest of some theory, the speculations of some quacks, or, not unfrequently, vexatious criticism and misrepresentation, have mostly dictated the assertions of authors who have written on this important subject. If we then compare what we find with the results of honest experience, we shall too frequently be convinced of the error of some, the ignorance of others, and the want of good faith in most of them.

As regards myself, I have pursued my researches without preconceived notions, and with the sole object of discovering the truth amongst so many contradictions. My numerous cases will enable me to furnish a material proof of every point I advance.

Since the time of Hunter, the experiments of inoculating syphilitic diseases have been made:—

- I. To prove the existence of the specific cause of syphilitic diseases; the venereal virus.
- II. To distinguish between diseases which resemble each other.
- III. To fix the differences which exist between the symptoms of primary infection, and those of general infection.
- IV. In a therapeutical view, either to prove the efficacy of prophylactic agents, or to modify, by a new infection, a former obstinate

syphilitic affection of old standing, or by combining syphilis with a disease which being incurable, may by this admixture, yield to a specific treatment.

V. And lastly, in a medico-legal point of view.

These are divisions I have adopted, and I shall presently proceed to review them generally and critically, which will form the first part of this work; in the second, I shall produce the practical observations from my clinical wards, followed by remarks on the methods of treatment; to which is added a Special Formulary, as I have used in the Hôpital des Vénériens.

A PRACTICAL TREATISE
ON INOCULATION,
APPLIED TO THE STUDY OF VENEREAL DISEASES.

PART THE FIRST.

CRITICAL RESEARCHES AND GENERAL REMARKS.

CHAPTER I.

THE EXISTENCE OF THE SYPHILITIC VIRUS, PROVED BY INOCULATION.

“IF an evident connection exist between cause and effect, in any class of diseases, it is undoubtedly in the venereal,”* and this constant and regular connection is proved by inoculation.

Since the time of Alexander Benedictus, a Veronese physician, who was the first who admitted; as a contagious principle, *a venereal taint produced in the sexual organs of women by the corruption of the humors which they exhale*, and which being recognized by Fernel, received the name of *lues venerea*, poison, venereal virus, &c. most writers on syphilis remained convinced of the existence of a specific cause, or peculiar deleterious principle.

Yet this cause, which is easily recognised at its source, and so regularly to be traced in its course, was overlooked by the ancients, until the terrible epidemic of the fifteenth century; and, in modern times, we find a few who are sincere in their incredulity, and many more interested disbelievers.

It is not my intention in this place to review all the arguments that have been brought forward to prove or disprove the existence of the venereal virus; but as inoculation has by turns been appealed to by each party, my aim will be to shew its definite value; and that we may omit nothing concerning this important question, let us first see what has been advanced by the authors opposed to the existence of a virus.

Bru, whose experiments have been cited by the opponents of the virus, and who was so under the influence of a strange theory, that it may be justly questioned if he saw what he relates in its proper light, and who, we may confidently assert, did not know how to appreciate the circumstances under which he made his experiments, expresses himself thus:—†

* Petit Radel, préface, à traduction de Nisbet.

† Méthode nouvelle de traiter des maladies vénériennes par les gateaux toniques mercuriels, par Bru, tome i, chap 3, p. 45. Paris, 1789.

“Is the virus inoculated with its venereal action, or only with a disposition? Is the pus of chancres, gonorrhea, and bubos, contagious, and can it inoculate syphilis?”

“To proceed with order and perspicuity, in this important examination, it must be proved, first, that what is understood by venereal virus, is not inoculated, and that it is only the *mode* which is inoculated, and that the virus or pus is only the result of the neutralization of the *mode*. Secondly, that the *mode* is only inoculated by virtue of a kind of electrification, after having manifested its action by the immediate contact of the affected part with the healthy, which leads us to examine the mechanism of the venereal act. Thirdly, that the venereal mode may exist in a fixed state, and that then it does not inoculate, but must first pass into a state of expansion. Fourthly, that the communicating *mode* is nothing else than the modified electric fluid, or some other analogous matter in an expanded form.

“The venereal virus, according to the received acceptance, is a something deleterious, which is combined with the pus. It is commonly, says Hunter, in the form of pus, or combined with it or some secretion of that kind.

“We are far from admitting this definition of the venereal virus; we think, on the contrary, that what is understood by virus, does not contain the deleterious matter which we shall call *venereal mode*,* and we think we shall be able to prove this fact. I have inoculated with the point of a lancet on the glans and interior of the prepuce, pus, from chancres of every kind and in all stages, and the disease never appeared.

“I have made the same experiment with the matter of a gonorrhea with as little success. I have also employed that of bubos at the moment of their being opened and always without effect†. Finally, I have conveyed pus, procured from these three symptoms, a considerable depth into the canal, and nothing has appeared. I have formed ulcers by means of blisters upon the glans penis, and prepuce, and when they were in a state of ulceration applied lint, impregnated with pus, produced by every variety of venereal affection. I have also repeated my experiments upon various parts of the body. I have placed it in the vagina of several bitches, and under the prepuce of several dogs, and all this without any result. I was thus led to conclude, that the pus produced by the several venereal affections, was not the virus; that it was not even combined with it, and that this pus was consequently only the result of its neutralization.

“This is an incontrovertible proof, and we only want to establish it in a perspicuous manner, which will be done in the following section. But before I proceed to the facts which belong to it, a question presents itself, which must first be answered, that there may occur no vacancy. It is necessary to determine what is the venereal

* By *mode*, is to be understood, what it has been intended to express by *leven*, &c. [To avoid confusion, I have found it necessary to translate the word. H. D.]

† In this case it cannot be expected that inoculation should produce any result.

mode of which the suppurations it excites are but a result; for under this supposition, which is clearly demonstrated, this *mode* cannot inoculate with the venereal action. Upon this hypothesis, as it is of a corrosive nature, not only ought it to shew it at the instant of inoculation, or at least very soon after, but always in the same place as it has been inoculated; this, however, only happens in the case of chancres. Moreover we see this supposition is not exact, as only a small point of the parts which have been in contact ulcerate, which proves that it is less the effect of an immediate than of a subsequent action. In the inoculation of the smallpox, we very plainly see the effect of the immediate action, for the spot soon inflames after the pus has been introduced. The effects of the virus are far more evident in this place than elsewhere; for the small-pox is often cured while the wounds from the inoculation are yet in a state of suppuration, and are always a source of infection, as the pus taken from these wounds a month after the desiccation of all other pustules, is still capable of communicating the disease. In the inoculation of the venereal *mode*, there is only the chancre which can be suspected as the point of contact with the virus, for surely this is impossible in gonorrhea, which has generally its seat in the beginning of the canal, or in bubo when it exists alone.

“ Another proof that the venereal mode does not inoculate with the venereal action, results from a very familiar circumstance, with which most persons are acquainted. A man has had connection with an infected woman, but does not yet feel any effects of the infection. In this state he has connection with a healthy woman, to whom he does not communicate any disease; yet the action is established in him, the disease declares itself in a few days, and sometimes on the same day.

It would therefore appear that the venereal disease can only be communicated after the *mode* has acquired its action; for when the symptoms have once shewn themselves, it has the property of being communicated, but the product of these symptoms is not contagious. In vain they inoculate pus of all kinds by all possible methods, infection does not take place. This pus then is not a requisite of the contagious property of the *mode*, it can only be the result, and a sign of its action; we must therefore seek this principle elsewhere. Thus, as the venereal mode cannot be inoculated by immediate contact in the act of coition before it has manifested its action; (which does not take place till some time has elapsed,) we ought to conclude, first, that the venereal *mode* is not inoculated with venereal action, but only with the disposition. Secondly, that this action is the result of its combination with a substance, over which it has some power. Thirdly, that this substance, such as it is supposed to be, must be of a nature to set the phlogiston in action, since its first product is inflammation. Fourthly, that, to preserve its contagious principle, it ought neither to be exposed to the air nor disseminated in the purulent excretions. Fifthly, and lastly, that only inculcating itself with a venereal disposition by actual contact, where there is friction and heat, and after having manifested

its action, one cannot suppose but that the venereal *mode* is electric fluid, or some modification of elementary fire, in an expanded form.”

After Bru, I think I ought to quote what Caron* says of the venereal virus, and its manner of infecting.

“If one may say that the impregnation of females is in fact a contagion, a kind of nervous virulence, we may with equal right affirm that the origin and contagion of the venereal virus are a species of conception, and not the result of a simple intersusception, or absorption of a virulent fluid. What has led into error, and caused the venereal pus to be confounded with the virus, although it was only the consequence of it, was, seeing the contagious principle communicated during the purulent secretion which it has caused. Deceived, moreover by the manner in which variolous matter inoculates, and by its supposed analogy to the venereal matter; deceived further by the progress of syphilis in the economy, it was easy to regard the venereal pus as the virus, and as contracted by absorption, and travelling through the system by means of the general circulation. This manner of regarding the process appears so natural, and is so sanctioned by time and custom, that we are startled by a contrary opinion. We may say yet more; there is so great a prepossession in its favor, that one is astonished, without being convinced, on finding, by numerous simple and easy experiments, that the inoculation of the venereal matter remains without effect.

“If it be remembered that even in mechanical lesions there is no purely physical or chemical process in the animal economy; if we reflect that it is impossible to conceive any morbid action without a foregoing disturbance in the vital powers, we shall soon be convinced that the venereal virus is not a substance, and that it cannot be inoculated as such; but that it ought to be regarded as an animal process, depending upon a disturbance or modification of the peculiar functions of the system. In fact it is the natural susceptibility of the vital principle, the sympathy of the capillary and nervous systems which develop it. Thus its primary cause is as little known as that of the other vital actions. All that we can comprehend of contagion is, that the virulent principles must have common properties with the bodies which contract them. Without being able to explain the nature of the venereal virus, or rather the principle of its conception in the system, we shall assume, as an incontestible truth, that it only takes place by a specific irritation; a peculiar sensation of the vital principle, as friction and heat, or a certain disposition in the parts in which it is situated, are necessary, and as the venereal secretion, having in itself nothing contagious or irritating, is not capable of developing it.

“In vain does the author of an excellent recent work, in declaring the result of the inoculations of the venereal pus, exclaim against the conclusions which are naturally deduced; they must either be refuted or more justly drawn; for singular and paradoxical as they may seem,

* Nouvelle doctrine des maladies vénériennes.

they ought to be admitted, if approved by reason and confirmed by experience.

“ But it is asserted, that it is only during the voluptuous excitement of the venereal act that the virus can be materially inoculated with the pus. Is it possible that the absorption of a purulent liquid should take place at a time when the exhalation and fluxion inherent to the venereal orgasm are diametrically opposed to this function? Moreover, how can the venereal pus, which has no virulent property, irritate the sound surfaces which it touches, even when they are excited by coition, unless this matter be rendered more energetic or more contagious, by the irritation of the parts which secrete it? For, supposing that the active or virulent principle resides in the pus before copulation, it is proved that this passive admixture deprives it of its contagious properties, and that if the venereal infection can be received, during coition, it is by a new act of the system which reproduces it. Indeed the syphilitic matter being without the domain of life, or sensibility, how should it acquire new properties? Further, granting it some irritating quality during coition, or even supposing that it could contribute to the contagion of the venereal principle, this could only be in a secondary and instantaneous manner, and favored by a far more powerful cause.

“ Thus it is not a virus which is inoculated in the venereal contagion, but an occult vice, which is developed in us: it is nature or life which produces the syphilitic constitution, and not the pus, which is only the sequence. In short, the material principles of contagious diseases, like that of life itself, are inseparable, abstract essences; they can neither be conceived nor studied as substances, and the idea of their existence has only reality, in as far as they are united to effects, of which they are regarded as the cause.

“ The venereal infection has at first only a local action, which extends itself in succession to certain parts; but it is always subordinate to the powers of nature, or subjugated by the essential organs of life, as the heart, stomach, brain, lungs, &c. never feel the effects of it. If the generating organs of the venereal virus, the skin and the exterior lymphatic ganglions, and more especially the organs of sense, receive it first, it is because a peculiar sympathy exists between these organs, and because the functions of the dermoid system are more or less the same in all exterior sensations; and lastly, because the whole capillary system of the cutis, as we have seen above, partakes of the venereal irritations. The venereal *mode* being once received into the system, it must, if its action be developed, establish itself on the skin, nose, mouth, eyes, ears, or pharynx, &c. as besides the natural disposition of these organs to contract it, the contact of the garments, air, light, and all exterior irritations can only favor its development.

“ A powerful and repeated irritation may disorder the natural sensibility of the skin, and produce some disease in the irritated parts, but it never causes the voluptuous sensation procured by the parts of generation, and those which are analogous to them. Thus the delightful

sensations in coition, suckling, chafing the lips and eyelids, which agitate and excite the sensitive principle, with so many charms and so much energy, are also the only means of contagion. However great the voluptuousness of kisses, and the sucking of the nipples, it may yet be thought that these organs, which so easily contract the venereal disposition, when its action is well developed, could yet never give rise to it of themselves, or conceive it primarily. Thus observation proves that the syphilitic affection is more or less wavering, degenerate, and dangerous, according as the act which gave rise to it is removed from coition, its true origin."

"After these statements, it appears easy to reconcile the apparently contradictory facts which the syphilitic infection of new-born infants, nurses, and nurslings, presents. We see that it has been justly asserted, from very exact observations, that the venereal virus was not materially contained in the semen, milk, or saliva; but, on the other hand we find the conclusion false, that the *aura vitalis* of the two former humors, and particularly of the sperma, acted upon by the I know not what, which constitutes the syphilitic principle, might affect the fœtus or nursling: although the venereal disposition, weakened or repressed in its action by the vital powers of father or nurse, did not present any indication of its existence. Certainly we must not conclude, from the experimental inoculations which have been instituted, that the matter of recent gonorrheas and primitive chancres, inoculated under particular circumstances, and with certain vital conditions, is always innocent; but we may be sure it will not impregnate with the syphilitic essence which it does not contain. Indeed, if by merely irritating the skin, we can produce a consecutive affection, will not the purulent matter of a phlegmon or a primitive chancre produce a peculiar action? But what will be its nature?—a purely local affection, according to the nature and energy of the inoculated fluid, and of the irritation.

After what has just been stated, it is evident that Bru has only brought forward his experiments, to support a theory which was opposed to the positive results of inoculation. And, as my researches will soon prove, either Bru did not know how to make experiments, or he was not candid. I should rather believe the former of these suppositions, considering the small number of experiments he made, and the long intervals between them. As to Caron, his arguments are so vague and unfounded, that they do not deserve a serious refutation; and the manner in which he expresses himself on the results of inoculation, proves that he has not only never practised it, but that he is not even capable of judging of it.

Let us now hear what M. Jourdan says against inoculation, which is a strong argument against the school to which this able writer belongs.

"It is pretended, says he, that the venereal virus belongs exclusively to the human race. This assertion rests principally upon some experiments from which Hunter and Turnbull have concluded that

neither dogs, rabbits, nor asses, are susceptible of having the syphilitic infection communicated by inoculation. But if the syphilitic virus cannot be communicated by inoculation to animals, neither can it always even to men. But real venereal affections are very frequently observed amongst brutes. Dogs and bitches often present very unequivocal traces of inflammation of the mucous membrane of the genital and urinal organs, followed by gonorrhea, chancres, phimosi, paraphimosis, swelling of the scrotum, &c."

After citing negative experiments, M. Jourdan adds,* "that Mr. Evans declares he has several times tried the inoculation of a gonorrhea upon himself, without success, and the inutility of these attempts, which have also failed in the hands of other experimentators, is very remarkable, as it shews that the efficacy of the venereal pus is in this respect very inferior to that of hydrochlorate of ammonia.

"Yet, says M. Jourdan, positive as these assertions are, other experiments prove that the insertion of pus of chancres or gonorrhea, can produce ulcerations followed by swelling of the neighboring lymphatic glands. But there is much contradiction on this subject amongst authors. According to Hunter, this result is rare: he states, that he has often applied venereal pus to ulcers, and only once succeeded in producing a venereal ulceration. On the other hand, it is very common and almost constant, according to M. Cullerier, jun., who, having made several experiments and repeated them several times on the same patient, has always seen ulcers, similar to those which furnished the pus, develop themselves upon the spot where the insertion of the syphilitic pus was made with the lancet upon the penis, whether by puncture or erosion of the surface. The same writer states, that three pupils of the venereal hospital have had, in consequence of similar experiments, ulcerations of long duration, and which have caused swelling of the axillary glands; the symptoms yielded to antiphlogistic treatment. Another, who made the same experiment some time after, produced no local irritation.

But it is of little importance, whether the symptoms, in consequence of these kinds of inoculation, be rare or common. They are not sufficient to prove the existence of a peculiar virus, because we frequently see similar and even more severe results from a simple puncture. Upon this point, Mr. Shaw's recent observations have thrown much light. The possibility, or at least the facility, of *inoculating* syphilis, is by no means admitted by all who believe in the existence of the virus. M. Lagneau doubts, whether the disease be inoculated by introducing a bougie covered with the gonorrheal matter into the urethra, and thinks that when a discharge follows, it is owing to the mechanical irritation of the canal, by the bougie. This is also the opinion of M. Cullerier, sen. who expresses himself thus upon inoculation in general. We think we may assert, that the fluid which serves as vehicle for the virus must possess a certain degree of warmth

* *Traité complete des maladies vénériennes*, 2 vols. 8vo. Paris, 1826.

a kind of life, which preserves to the virus the power of attaching itself to the new bodies, to which it has been transmitted.”*

It would have been more correct to have said, that the parts exposed to the contagion must be in a certain condition, in order to receive it.

Upon an attentive perusal of the preceding pages it is evident, that the arguments of M. Jourdan cannot stand the test of reason and experience. Indeed, experience proves, that, as Hunter and Turnbull have stated, the animals they have mentioned are not susceptible of being infected by syphilis as met with in the human subject, by means of inoculation, which by no means prevents their having inflammation of the mucous membranes, and ulcerations on the organs of generation; as all inflammations and ulcerations of these organs are not necessarily syphilitic in brutes, more than in men, even though consequent on coition, of which we have ample proofs. As regards Bru’s want of success in the inoculation of syphilis in man, we know the cause, and the experiments I have made, leave no more doubt on the point, than on those of Evans, which, although well performed, necessarily produced the consequences which followed without detracting from the value of inoculation of the pus of chancres, as we shall see hereafter. As to the refutation of the positive results obtained by M. Cullerier, jun. the doubts of M. Lagneau, and the opinion of the late Michael Cullerier, and also the remarks which follow, (and to which M. Jourdan should have added the note to the treatise on the different kinds of gonorrhea by Hecker,†) their value will be better estimated, after having seen the result of my researches.

But to pursue the course I have adopted, and that we may know all that has been said on each side, let us see if M. Richond des Brus‡ has been more fortunate in his refutation of the facts relative to inoculation.

“We must conclude, says he, that the contagion of the venereal diseases does not prove that they depend upon a specific virus.

“Let us examine whether the development of ulcers and swelling of the lymphatic glands, after the inoculation of the venereal pus, can prove the existence of this essence.

“The results of these inoculations are far from being so confirmatory of the syphilitic theory, as its defenders think. In many cases the insertion of the venereal pus under the skin, remains without any effect, and where some inflammatory symptoms are locally developed,

* Dictionnaire des Sc. méd. tome i. *Paris*, 1821.

† One might doubt the experiments of Harrison, cited by Swédiaur, or those by Bell, upon hearing those lately made in the Hôpital des Vénériens, at Paris, by Bertin, Cullerier, and Gilbert, who have repeatedly endeavored to inoculate the virus of gonorrhea and chancre, and who have all assured me they were never able to produce a single symptom; whence follows the conclusion, that these diseases are only to be communicated by coition. *Traité des différentes espèces de gonorrhées*, par A. F. Hecker, trad de l’Allemand, par A. J. L. Jourdan avec des notes de P. P. Alyon, p. 255. *Paris*, 1812.

The same men afterwards obtained contrary results, which proves the first experiments were badly performed.

‡ De la non-existence du virus vénérien, tome i. p. 76. *Paris*, 1826.

or towards the distant ganglions; this is easily to be explained, without having recourse to admitting a chimerical essence.

“ Hunter, (whom I consider as the author who has had the most rational ideas of the diseases to which we are liable, and in whose works, truth is often seen to shine out of a number of errors, which were common to his age,) made divers experiments as to inoculation of the syphilitic virus, with the following results—

“ I. He took pus from the ulcers of a syphilitic patient at St. George’s Hospital. He made three small incisions upon the soft and sound skin upon the back, (deep enough to bring blood) into which he introduced purulent matter. He then made a fourth with a clean lancet. All the wounds healed and none re-appeared.

“ II. Upon a man who had on different parts of his body venereal pustules, he inoculated, on sound parts of the skin, pus from a chancre of another person, as well as that which flowed from his own ulcers. The wounds impregnated with chancre pus, became well marked chancres, whilst the others healed. Hunter states, that having often repeated the above experiments, he always found the same results.

“ These facts, I think, might lead to the conclusion, that the general infection of the humors, which it is pretended exists when any of the signs of what is termed confirmed syphilis show themselves, is chimerical; since the pus taken from venereal pustules, and constitutional ulcers, was not charged with virus and did not produce the effect which ought to have been observed, if it had been virulent; and since, if it had existed, a new infection could not have been made with the pus of a stranger, the whole economy being in a manner saturated.

“ III. From the last fact, in my opinion it might be concluded, that the contagious property does not depend on the specific essence of the pus, but most often upon the greater or less acuteness of the inflammation which forms it. Thus gonorrhœas, which are contagious in their acute form, cease to be so when they become chronic; and in the same manner the nasal secretion, which, during the first days of a violent coryza, excoriates the lips, loses this property towards the end, and leucorrhœas in an acute stage, often produce urethritis in men, who expose themselves to the excreted mucus, whilst in their chronic state they are generally innocuous.

“ If it were not so, it would be difficult to understand the result obtained by Hunter; for it is clear, that the pus from the venereal pustules ought to be more virulent than that which flows from a chancre, as these are the expression of a general infection, whilst the chancre is only the germ of it.

“ Perhaps it may be objected, that the virus taken from an individual cannot have any action on himself, the parts being, as I say myself, supersaturated; whilst a new virus being deposited in a system, which is not accustomed to it, may cause morbid action. But, in the first place, it is not true that the pus furnished by a person, other than

the one inoculated, contains for him a new and unaccustomed virus, for the virus is ever the same, and it is the interest of the theory which I am attacking, that it should be considered identic in different individuals, otherwise its effects would be very different, and they assert that they are the same. In the second place, the habituation of the system to the virus is a dream, which daily observation dispels. Indeed, what practitioner has not had occasion to observe in patients suffering under severe attacks, new symptoms occasioned by inoculation of their own pus.

“ I often observed this fact in a man named Perrez, whom I treated with mercury for ulcers and bubos. An ulcer on the glans increased much in extent during a strong salivation. The thigh was touched by the pus which flowed from it on a spot where there was a bubo open at its extremity. This caused an ulcer, which increased to the size of half-a-crown, with hard, uneven edges, a greyish surface, and rounded form. In another soldier, I saw precisely similar ulcers, produced upon the thigh by the matter of a gonorrhea. In my wards at Strasburg, I daily saw gonorrheas produce ulcers, bubos, vegetations, &c. although they might be considered as the results of a general infection.

“ Moreover if I might oppose to the opinion I have just attacked that of Hunter, who contends that two actions cannot take place in the same constitution, nor on the same part at the same time, and that this is the reason that some persons resist certain miasmatic, or contagious affections.

“ But to return to the experiments. A person was inoculated with matter from a decidedly venereal ulcer, upon one of the tonsils, as well as from a gonorrhea. This latter produced a chancre; the other was without effect. It is very remarkable, that pus coming from a consecutive ulcer, and consequently *highly venereal*, produced nothing, whilst the mucus from a urethritis, a disease, whose syphilitic nature is generally denied, produced a chancre.

“ Either Hunter was deceived in thinking the ulcer of the tonsil very venereal, and the diagnosis is not so easy as it is thought, or it was so, and then the pus which flowed from it was not virulent. One ought to place little reliance upon the examples which authors relate of inoculation of syphilis, by means of pens impregnated with saliva, glasses, bandages, &c.

“ Ought it to be concluded that a gonorrhea is venereal, because it has produced a chancre? This would not be reasonable, as it is fully proved that similar phenomena are produced by gonorrhea, occasioned by causes other than coition.

“ Bru, who from the result of the numerous experiments which he made, has been led, like Hunter, to consider the general infection of the system as an irrational hypothesis, furnishes the following case:—

“ Two sailors, in order to avoid the laborious work they were obliged to perform, and to escape a voyage which was about to be made, put some cantharides upon the glans, which caused symptoms which ap-

peared to be venereal. When the affection, which resulted, was partly vanished, and only a slight ulceration remained, they endeavored to inoculate themselves with the complaint of their comrades. They took pus from several of them, applied it to their ulcers, and waited in vain for the expected result; they got well notwithstanding their repeated attempts.

"In many other cases the surgeon attempted to inoculate the pus of ulcers on the penis, or of suppurating bubos, but could never obtain venereal effects. He also made some trials on dogs. On many of them he produced excoriations with cantharides, and then applied venereal pus to them and obtained no result. It is easy to understand the reason; it was not because the syphilitic virus is peculiar to man, as has been said, but because the cantharides had caused a sufficiently lively action to prevent the action of a new irritant."*

M. Dubled, interne at the *Hôpital des Vénériens*, related, March 11, 1824, in the surgical section of the *Académie, Royale de Médecine*, an experiment that he had made upon himself, February 27.† "Having gone, says he, to the venereal hospital, I requested M. M. Hutin and Cazoviel, internes at this hospital, to inoculate me with syphilitic virus. We went into the first ward, and M. Hutin, having taken on the point of a lancet some pus from a chancre of the glans, as well as purulent matter from the canal of the urethra, inoculated it on the middle of the dorsal surface of my fore arm. Upon withdrawing the lancet, he applied his thumb to the puncture and kept it there some minutes; we then applied a compress to it, dipped in fresh water, and fastened it with a bandage. The pain, which was pretty acute at the moment of the puncture, diminished continually, and on the second day it was perfectly cicatrized.

"I have frequently pricked the thighs and abdomen of patients under my treatment with lancets laden with pus, from the most severe chancres, and, with the exception of a single case, in which there was a slight inflammation, I never obtained any result.

"M. Bertin could never produce syphilis, by inoculation, which he tried upon several individuals.

"Probably, (as M. Dupau observes, in reply to the observation of M. Dubled,) if the inoculations were made upon the prepuce or glans of an individual, during erection, the infection would be more easy; for in this case, the engorgement of the capillary vessels, which enter into the composition of the corpora cavernosa, causes an increase of heat and sensibility, which renders the absorption more easy, and the

* The want of a successful result in this case, only proves, that certain conditions of tissue are necessary in order that the venereal virus may act, and experience has shewn me, that vesicated surfaces are particularly difficult to inoculate. Indeed, I daily use blisters on virulent bubos, even after they are opened, and when they afford the specific pus; and whilst this can be inoculated with the lancet on every other part of the skin, the vesicated surface, over which it flows, is not infected; I have had but two or three exceptions to this general rule.

† Experience de M. Dubled. Extrait des annales de la médecine physiologique No. d'Avril, 1824.

excitability of the part most exquisite. But the symptoms, which might result from an inoculation, made under these circumstances, would nevertheless, not be venereal.

“I think, with M. Dubled, that the venereal pus may cause an ulcerative inflammation; but that in that case it would only constitute a purely local affection, which, like other inflammations, might cause, either by sympathy, or continuity of tissued, divers disorders in the neighboring, or remote organs.

“In opposition to what I have related, without doubt, the result obtained by three young men from inoculation upon themselves, will be cited. All three are said to have made a puncture on their arms with a lancet, laden with syphilitic pus. In one of them, there followed a swelling of the axillary glands, which, being treated by simple antiphlogistic means, suppurated and produced a considerable destruction in the axilla. In the second, the puncture became inflamed, ulcerated a chancre with all the *venereal characters* presented itself, and extended its ravages. But see to what extent the desire of the marvelous may be carried! It is pretended that this young man, after having consulted a professor of the Ecole de médecine, who told him that the ulcer was venereal, returned to the hospital and opened one of his crural veins.”*

Whilst we pay M. Richond the tribute of praise due for services he has rendered to science, can we admit one of his arguments against the positive facts of inoculation, and the proofs of which, he himself furnishes? I think not; for if I rightly understand him, his objections amount to the following propositions.

I. The results of inoculation are negative or uncertain.

II. The secondary symptoms of syphilis, *more virulent than the primary*, ought alone to inoculate themselves and the contrary takes place.

III. If constitutional syphilis and general infections exist, individuals saturated with the venereal principle, ought not to be susceptible of a new infection, and yet Hunter found it otherwise.

IV. The contagious property of the venereal secretions does not depend upon the essence of the pus, but upon the degree of inflammation in the part which furnishes it.

V. The pus of gonorrhea, which many authors regard as a simple affection, ought not to inoculate, and yet Hunter has found the contrary.

But how can M. Richond support such propositions? May they not be answered, as he will soon be convinced?

I. That the uncertainty of the results of inoculation, depends upon the want of precision in the experiments;

II. That it does not follow, that because they are owing to a specific cause, the secondary symptoms should inoculate like the primary, or be more virulent than the latter;

* This is a fact, he was one of my friends. Note of the Author.

III. That the possibility of inoculating primary symptoms, as he has observed it, does not preclude the existence of a general affection, as one infection does not prevent a second;

IV. That chancres can never be produced by the pus of a gonorrhea, leucorrhea, or of a simple coryza, although it may cause an irritation, or even excoriations;

V. That when the pus of a gonorrhea produces a chancre, there is something else with it.

VI. Lastly, that his experiments have deceived him, and that those of Bertin were badly performed, and that M. Dubled has since told me, that he has entirely changed his opinion?

M. Devergie,* to whom physiology is much indebted, not adding anything to the preceding contradictions, will not require a separate refutation. He asks, whether experience is in favor of inoculation? And says, it has been often attempted, but has never produced any decided result. In many cases, according to him, it has been followed by no effect, either when made with the pus of primary sores, or of secondary affections. Sometimes local symptoms have appeared in the neighboring or remote glands. The following is according to M. Devergie, the result of the experiments of several practitioners.

M. Percy tells him, he often failed, especially with the pus of bubos, whilst he *thought* he had succeeded with the matter from chancres and gonorrhea. "I myself made some experiments, he adds, but they led to nothing satisfactory."

M. Desruelles expresses himself, as follows, in the work he has just published on this subject, and in the spirit of the new doctrine.†

"Authors, says he, not being able to determine, *à priori*, the particular and distinguished characters of ulcers, have recourse to means which are uncertain and cannot guide them in the diagnosis; thus they affirm, that a lesion of the parts of generation or others is syphilitic, when accompanied by another lesion; when caused by coition or any circumstance which would lead them to suspect the origin from these complaints; if these investigations do not satisfy them, they inoculate the pus of the ulcers.

"A more vicious means of diagnosis cannot be proposed, than the inoculation of the pus collected from the surface of ulcers, which some of late have not hesitated to extol. What is the result of this practice? The patient has an ulcer or two more, and the chances of general infection are augmented in proportion, so that they give a man constitutional syphilis, who would perhaps otherwise not have had it. It is true, that the partizans of this experimentary operation, think that there is no more difficulty in curing a double syphilis than a simple, by means of mercury. The ulcer which results from inoculation will not possess more characteristic marks for those who were unable to recognize them on the ulcer which developed itself at first; and if by any

* Clinique de la maladie ésyphilitique par M. N. Devergie. Paris, 1826.

† Traité pratique des maladies vénériennes par H. M. J. Desruelles, p. 167. Paris, 1836.

chance, through the inadvertence or negligence of the operator, the operation should not succeed, the complaint would then be declared to be unconnected with syphilis, and the patient, having received a clean bill of health, would quietly go his way and communicate disease to persons with whom he might have connection. To such an extremity may a false opinion, whose consequences have not been foreseen, lead.

“ During the eleven years, that we have studied experimentarily the venereal diseases, at the Val de Grâce, we could never resolve to inoculate any of the syphilitic diseases.

“ Our position, we thought, did not permit us to subject the soldiers of the army entrusted to our care to the uncertain chances; moreover, we hold similar opinions on this head with M. Cullerier and Ratier. On the other hand, M. Ricord, surgeon to the *Hôpital des Vénériens*, has no doubt good reasons for not partaking of our fears and scruples.

“ We do not presume to blame M. Ricord, we shall profit by the experiments which he makes, with so much perseverance, to decide this important question; and if he obtain the results he expects, we shall be grateful to him for the zeal he displays in obtaining them.

“ These are the principal results at which he is already arrived, we give them as we have them from M. Ricord himself.

“ A chancre can always inoculate during its period of ulceration.

“ The suppurated bubo, from absorption, can always inoculate.

“ The inoculated pustule can be reproduced by its pus, *ad infinitum*.

“ The pus of an urethritis, where there is no ulceration, can never inoculate.”

“ From the above it seems that only the ulcerative form, and in the acute stage, is capable of inoculating. We shall wait before we judge of the value of M. Ricord's experiments, till he has completed all those he proposes to make, and has published an account of them.

“ From what has just been stated, we may draw the following conclusions:—There is, properly speaking, only one kind of primary venereal disease, the irritation of a sensitive surface, which has been touched by the contagious cause.

“ The other diseases, such as ulcers, bubos, swelled testicle, and excrescences, &c. are only affections, whose developement is secondary to the *erythematous* form which is primary, and whose appearance always precedes that of all other forms. Those under which are ranged the consecutive affections, also depend upon the *erythematous* form. Whatever the kind of venereal disease may be, no character can be assigned to it so defined, that no uncertainty shall remain in the mind of the observer as to its cause.

“ Inoculation has not yet thrown sufficient light upon the diagnosis, to remove all the difficulties with which it is surrounded.”

Here we see M. Desruelles does not deny the results of inoculation; but it is very remarkable, holding the opinion he does, that he

should express his doubts upon the uncertain chances to which it would subject the patients confided to his care. As to the opinion which M. Desruelles also holds of the evils of experiments, I cannot let it pass unrefuted.

It is possible that men, like M. Desruelles, notwithstanding the opinions of venereal diseases which they profess, have not thought it right to make experiments, and even if they blame them, it is an opinion one ought to respect. But that those who have made them, and who do not fear to do it from a diseased to a healthy person, should have expressed themselves as we have seen, is difficult to understand, especially when the same persons, since the article quoted appeared, have again made inoculations.

Let me here be permitted, whilst I acknowledge the merit of the works of my learned colleague M. Cullerier, to cite the article *Diagnosis*, from a thesis by one of my pupils.*

Diagnosis.—"In the beginning of the work we showed how insufficient the ordinary means of diagnosis are. The seat can prove nothing, as the organs of generation are subject to ulcerations or mechanical lesions, which cannot possibly be traced to chancre: which, besides, is found with its unquestionable characteristics in every part of the cutaneous or mucous tissue. The form affords nothing more definite; we have seen that it can vary according to the seat or some complication unconnected with the disease. Some authors have recommended the progress of the disease as the best means of diagnosis. This appears to us very insufficient. In the first place, we can mostly only see part of it, and out of a hundred cases, taken promiscuously, it will scarce be found regular in two of them, influenced as it will be by idiosyncrasies and accidents, which may veil it. The more or less painful or inflammatory state sometimes varies from one extreme to the other, without our being able to account for it. The treatment cannot be appealed to; for, as we have said, ulcers and sores which are become atonic, or presenting such appearance in consequence of bad treatment, demand, in all its details, that treatment which some have regarded as probatory. Lastly, let us hear the authors of the article *Syphilis*, in the dictionary in 15 vols. who, after having combated every means of diagnosis for chancre, even in part that which they consider the best are obliged to content themselves with writing these words. We are much mistaken or the diagnosis of chancre, regarded from the point of view in which it has just been presented, gains something in certainty and utility. Undoubtedly it is sad to see science not only little advanced, but still encumbered with errors; but is it not better to stop and return, than to follow the apparently beaten and easy path which leads to nothing positive, or open a new one at a hazard without knowing whither it will lead?"

"We will also transcribe what M. Blandin says in his excellent article upon ulcers in general, in the Dictionary in 15 vols. 'The

**Considération sur le chancre*, par M. le docteur Doussaint de Gand, 14 mars, 1837. Paris, thèse, No. 68.

characters of syphilitic ulcers are not so defined as some persons think. Ulcers depending upon a different cause, have often the greatest resemblance to them. However, in general, syphilitic ulcers are round, with violet, hardened, raised and abrupt edges, the ground is hollowed and greyish; the suppuration which they furnish is bloody, and in small quantity. The collateral circumstances, the position of the ulcers in the places where they generally show themselves, greatly aid us in the diagnosis; but we must confess, that in certain cases where the patients have an interest in concealing the truth, a distressing obscurity may exist as to the nature of the disease.*

“To these two important testimonies, which pretty justly appreciate the proposed means of diagnosis, we shall add the propositions laid down by M. Ricord. ‘The unequivocal, incontestible, pathognomonic signs of chancres, are the production of certain symptoms of general infection, which never happen without this antecedent, and especially the constant and regular results of inoculation, during the period of progress.’

“After having long attended the clinic of M. Ricord, and seen all his experiments repeated, we partook of his opinion; for it seemed to us rational to consider, as chancre, the primary symptoms existing alone in a patient, and which, in case it was followed by secondary symptoms, presented what all enlightened practitioners recognize as belonging to syphilis; and which also, at a certain period of its existence, presented the regular character of inoculation. What are the arguments that are opposed to this latter criterion, which we think of the utmost importance, as M. Ricord’s first means will only do in certain cases? M. M. Ratier and Cullerier seem to have summed them up in the article Syphilis, of the *Dictionnaire en 15 vols.*”*

But we will let Messrs. Cullerier and Ratier refute, by the article inoculation in the same work, this accusation, which we must say would attach infamy to all who may dare to come within its reach.

In reply to the first part, in which it is said that inoculation is the most faulty means of diagnostic, let us quote a few lines from the above article, by the same authors. “The pus of the primary ulcers taken at any period whatever of their existence, (but principally when they are not of old-standing, and the product of the morbid secretion has not been changed by contact with the air or any substance which acts chemically upon it,) and inserted under the epidermis or epithelium with a lancet, or only applied to a cutaneous or mucous surface, deprived of the protecting membrane, causes, on the point of insertion, an inflammation of peculiar form, and which appears to us characteristic.

“The reproach, as to the faultiness of the diagnosis by inoculation, cannot stand against the answer they themselves give, when they say, that a chancre ought, in all its stages, to produce, by inoculation, an inflammation of a characteristic form and nature.

* See p. 21, the articles of M. Desruelles already quoted.

“The patient has generally one or two ulcers the more, and the chances of general infection are augmented in proportion, so that they have given constitutional syphilis to a man who would perhaps never have had it.”

The accusation is serious; but Messrs. Cullerier and Ratier reply, a few pages further (article Syphilis.)

“We have no hesitation in saying, that the affections consequent on chancre are owing to the negligence of the patient, as well as to the ignorance of the surgeon, who, not understanding the treatment, and imbued with the opinions of the schools, neglected the local affection which was before his eyes, to remedy evils which he saw in a distant perspective, and which he might easily prevent. When patients have applied to us soon after the infection, we have always been able, if they were docile, to put an end to the disease in its primary seat, and guarantee them from ulterior consequences.”

As to the *double* syphilis, that has been mentioned, we confess we were at a loss to understand it, and nowhere do we find this species described, not even in the classifications of Messrs. Cullerier and Ratier. However, as we have just seen, that according to these gentlemen, the primitive affections *are in the power of the practitioner*, one might prevent it at pleasure. Lastly, all difficulties would be removed, if, as they think, inoculation produced in animals the same results as in man, for there could be no blame attached to such experiments; but, unfortunately experience has proved their assertion completely false.

“Moreover, the ulcer which results from inoculation, will not possess more characteristic marks for those who were unable to recognize them on the ulcer, which developed itself at first.”

The answer is to be found in the article Inoculation, where we read, as we quoted, that the pus of a chancre being inoculated, causes, upon the point of insertion, an inflammation of peculiar nature and form, which appears characteristic. Then, a page further, after having said that the different kinds of venereal pus yield nothing by inoculation which can be characteristic, except the chancre or primitive ulcer, Messrs. Cullerier and Ratier add: “when we say that the pus produced by divers morbid surfaces may be inoculated with impunity, we do not pretend to deny that it has often produced a sore; but we assert, that it acts then like acrid and irritating substances, *whilst we understand by inoculation the production of a morbid affection, after an inoculation, constant in its form, and regular in its progress and duration, and in its turn furnishing a pus susceptible of being inoculated.*”

Then inoculation will distinguish chancre from every syphilitic ulcer, either secondary or other.

As to the latter objection, founded on the case in which the inoculation does not succeed, through the inadvertence of the operator, beside the simplicity of the practice which will hardly admit of such conjectures, the passages in which Messrs. Cullerier and Ratier bear testimony to the tendency of the pus of chancres to inoculate, although

the circumstances be little favorable, have appeared to us so very numerous, that we did not think it necessary to report them.

Lastly, as to the question relative to the patient who receiving a clean bill of health, will go his way and communicate a grievous disease to those with whom he has connection, what surgeon would dare to permit or advise coition to a patient with ulcers on the organs of generation, even if he were certain that the disease was not syphilitic? Would it not be exposing him in the most favorable condition for infection, or at least by the irritation produced, to transgress all the rules which the authors of the Dictionary have laid down, with so much care, for the cure of the most simple ulcers?

After these quotations from Messrs. Cullerier and Ratier, which seem to furnish us with the most victorious arguments against the principles they have promulgated, let us sum up all these arguments, adding some remarks upon what we have seen.

How can Messrs. Cullerier and Ratier treat inoculation as the most faulty means of diagnosis, when they lay down as a certain and invariable rule, that the pus, furnished by all kinds of ulceration which are considered venereal, even that secreted by the papula mucosa (*papule muqueuse*) the most characteristic symptom of syphilis, does not, by being introduced under the epidermis or epithelium, produce an inflammation of characteristic form and nature, whilst chancre or primary ulcer alone possesses this property? When we see, according to the passage we quoted, Messrs. Cullerier and Ratier declare that inoculation is necessarily the true means of diagnosis, thus to distinguish, by the trial of its pus, the ulcer resulting from the inoculation of chancre from any lesion, which may in certain cases be produced by other pus, tried in the same manner, is not that which they consider as a means of diagnosis, and to which they appeal in case of chancre inoculated with a lancet from the pus of a primary and therefore inoculable ulcer, consequently also probatory for the latter?

Thus, according to the opponents of inoculation, must we not admit that when the pus of an ulcer produces certain symptoms which are constant in their form and developement, and presenting certain characteristic conditions, the ulcer, whose pus has been inoculated, was a chancre, and consequently that the necessary character, without which an ulcer ought not to be called chancre, is to furnish a pus capable of being inoculated under the given conditions?

As to the uncertainty of the results obtained by inoculation, and the consequences to be drawn from them, I reply, that badly performed or ill appreciated experiments can lead to nothing; and that if these authors were prompted by the interest of science in their experiments, the same interest and the welfare of humanity induced me to verify their works, add new facts, and rectify gross errors.

To most persons, who will examine with unprejudiced minds, it must be clear from the study of the phenomena of general contagion, and as I have before said, from the constant and regular connexion between cause and effect, that the syphilitic diseases depend on a spe-

cific agent or deleterious principle, which is only to be considered an entity in the same degree as the peculiar principle of hydrophobia, the venom of the viper, the specific cause of the small-pox, &c. &c. &c.

And those who will search for this cause, ascertain its effects, and endeavor to neutralize its principle, or its consequences, will, I think, deserve some encouragement, and they will throw back upon their antagonists the accusations of indolence, ignorance, and quackery, which appear to me more applicable to those who foster a doctrine which has thus been summed up.* “Physiological medicine ought to confine itself in syphilitical affections to the study of the forms and degrees of irritation in the different parts of the body, and note the modifications it can oppose to it.”†

Well convinced that the subject was not exhausted, and that I had another mission to fulfil; encouraged by the most celebrated names and the greatest authorities, I commenced the researches, whose results I am now about to relate.

It has been asserted, that the venereal virus is a chimerical and intangible essence; that the effects imputed to this imaginary cause only depend upon the nature of the seat, the peculiar vitality of the diseased parts, the different degrees of inflammation, and the sympathetic reactions which may result from it.

I had, therefore, to endeavor to materialize this cause, to coerce this pretended imaginary essence, assign it definite and specific characters, which should not allow it to be mistaken, but by ignorant and uncandid persons; and to prove that the seat, vitality, and functions of the organ, have only a secondary influence upon it, and that it was not the more or less fortuitous consequence of inflammation.

If we are to study a body, and distinguish it from those with which it may be confounded, must it differ from them in every point? Are all the characters of each order, genus, and species different in physics, chemistry, or natural history? Is not one often sufficient to distinguish the difference? In our medicinal substances, for example, is it always easy to point out the essential condition which gives a substance a property, not possessed by another, which is nevertheless in many respects analogous to it? And does this property, although invisible, immaterial, and not separated from the substance which possesses it, constitute an entity? Undoubtedly not. The incontestable existence of the venereal virus is proved by a peculiar property of a distinct morbid secretion, and therefore the pus furnished by certain syphilitical affections has the constant and regular property of reproducing a pus similar to itself, by an action similar to that which first secreted it. We may, by this essential character, distinguish from each other different animal physiological and morbid secretions, with the same precision as we do chemical substances. If we inoculate the venom of the viper, the saliva of a mad dog, the pus of variola,

* Desruelles, *Traité pratique des maladies vénériennes*. Paris, 1836.

† Broussais.

vaccine or syphilis, we shall have specific effects, which will leave no doubt of the difference and peculiarity of the causes which produced them.

Syphilitic pus may present globules more or less resembling those of other kinds of pus. It may, according to the locality, be combined with other morbid or normal secretions, particularly with mucus, in form of muco-pus. According to the locality or its combinations, it may remain alkaline or become acid, it may contain animalculi or be devoid of them; but, as distinguishing and specific character, it can inoculate itself and produce characteristic results.

Convinced, nevertheless, as I have before said, that syphilis is one of the most serious diseases which can afflict mankind, I was obliged to exercise the greatest prudence and reserve in my researches, yet without being deterred by pusillanimous fears. I still feel convinced, that it is not allowable for a surgeon, under any pretext whatever, to communicate to a healthy individual a disease, the consequences of which cannot be foreseen; and if in consideration of the interest of science, which undoubtedly influenced them, we might find some excuse for those who have thus experimented, their example cannot now be followed without culpability.

Although the experiments upon animals were negative in their results, even in the hands of the most experienced men, I felt it necessary to repeat them. Public experiments have been made in my clinic, at the *Hôpital des Vénériens*, upon dogs, rabbits, guinea-pigs, cats, and pigeons, and in all cases with negative results.

All the experiments repeated in every possible way of infection and inoculation, without neglecting any necessary precautions, were each time made with pus, which at the same time produced in man positive results; so that after these experiments, joined to those which we already possessed, we may conclude that the inoculable principle of syphilis is peculiar to man, and cannot be transmitted to brutes. This, however, as we have seen, does not prevent them from being subject, under the influence of irritating causes, to inflammations of the sexual organs, which, as in all other tissues, may be followed by suppurations, ulcerations, &c. without these lesions being connected with the syphilis of man.

Let it, however, be remembered, that even if any one should be able to transmit true syphilis to an animal, that would not detract anything from the specific nature of the syphilitic principle, any more than the possibility of transmitting the vaccine of the cow to man, disproves the peculiar nature of this virus.

Hitherto, then, syphilis can only be inoculated in man; but, as we said above, not being allowed to pursue the researches from a diseased to a healthy individual, my observations were necessarily confined to the patient himself—they were founded upon the following propositions.

I. A venereal affection already cured, or still existing in whatever

period it may be, does not prevent others being contracted, and the number of possible successive infections are without limit.

II. No individual actually infected and under the influence only of primary symptoms in one region, ever sees symptoms similar to the first developed in other parts of his system, except by a new contagion from contact with the pus of the first, or communicated by another individual.

III. Secondary symptoms, or general infection, never prevent the patient from contracting other primary.

IV. The frequency of constitutional syphilis, is in nowise dependant on the number of primary symptoms developed at one time.

Do not the observations of former times unite with every-day experience, to corroborate the experiments of Hunter, which prove that one infection does not prevent a second; not only in the development of symptoms different in form and principle, but also of those which are owing to a cause of the same nature? Do we not continually see patients who have a gonorrhœa contract a chancre in a fresh sexual intercourse; or having at first a chancre, are attacked with gonorrhœa, after a fresh coition? I should think no candid person would attempt to deny so well known a fact. But the manner of the production of every symptom which follows the first, might be contested. Those who think there cannot be a primary infection without general symptoms, look upon all those which follow as in consequence of a first symptom, without the necessity of a new contagion. Thus they attribute distinct diseases, contracted at different times, to the same cause. But it must be evident to all accurate observers, who will take the trouble to distinguish primary from secondary symptoms, that the primary can only be produced by the direct application of the contagious pus to the part, or by the conveyance of this pus by the *vasæ lymphaticæ efferentes* to the ganglions in which they terminate, without ever passing them.

The experiments I have made on this subject are very numerous, and to verify them at any time, it will suffice to know the intention in which they were made.

It is thus that in all individuals affected with primary reputed venereal symptoms of all kinds, artificial wounds, or operations performed at a distance from the venereal lesions, have never assumed the syphilitical appearance, nor any of the characters of venereal affections, when proper precautions have been taken to prevent their being soiled by the contagious pus. Many examples have been cited, of wounds having assumed the character of primary ulcers, evenomed by the general infection, and nothing is said to be more common in leech-bites. Yet in all these cases where the real explanation was overlooked, the true cause might have been found. Thus we often see, where a number of leeches have been applied on and around the penis, some of the wounds assume the appearance of chancre, whilst others heal at once. If we search for the cause of this difference in wounds of similar nature in the same region, we shall soon see that

those alone are attacked with which the penis could come in contact, whilst those which are out of reach remain uninjured. A woman in one of my wards, at the *Hôpital des Vénériens*, had a number of chancres on the vulva; these chancres were primary, and at the period of development they furnished an abundant suppuration, when she was seized with a rheumatic pain in the right maleolus externus, to which some leeches were applied. Some days after, the patient, who had at first been much relieved by the leeches, complained that the bites were very painful; she was examined, and they appeared inflamed and like pustules of ecthyma, to which succeeded ulcers, having all the characters admitted to belong to true chancre. The part where the leeches had been applied, the distance of the situation of the primary ulcers of the vulva sufficed for most of the gentlemen who attended my clinic, to regard this accident as a consequence of a general infection, or a bad disposition in the subject. I ordered some more leeches to be applied to the other leg, and also some fresh ones to the same leg, taking care to prevent any consequence to these new wounds by isolating them from all contagious contact; and then whilst two punctures, made with a lancet, one with the pus taken from the chancres of the vulva, and the other from the ulcerated leech-bites, produced ulcers like those which furnished the pus, the wounds which had been guarded from soil healed without any accident.

But it sometimes happens that leeches, applied to bubos, cause ulcerations of a malignant nature, without the origin being traced to the application of contagious pus. In these cases, either the leech-bites, are simply irritated or inflamed, and have been followed, as it often happens, by a kind of furuncle which suppurates, and then the pus which they furnish does not inoculate; or having become true inoculable chancres, the infection was communicated from within outwards—i. e. that being placed upon a virulent suppurated bubo, the pus of the ganglionic chancre has inoculated the leech-bites in passing them, to make its escape. This is the same with every analogous wound, whether accidental or artificial.

Fabricius Hildanus relates, that a man affected with the itch, was, in 1609, infected with syphilis, of which he died, from having slept in sheets in which several syphilitic persons had sweated. But he has omitted to state in what condition these latter were, and whether they had any ulcers. It is more than probable that some such affections existed, and that the pus which flowed from them, having adhered to the sheets, afterwards came in contact with some points of the skin which were deprived of the epidermis.

I have stated, as has been proved by experiment, that the cessation or persistence of a primary symptom, in whatever period of its existence it may be, does not prevent the patient from being susceptible of contracting another. But the most important point, and which alone would authorize us to pursue our researches, sanctioned as it is by Messrs. Fricke, of Hamburg, Lallemand, of Montpellier, Ruel, of Strasburg, and Blandin, surgeon of the Hôtel Dieu, of Paris, &c. is,

that the number of secondary symptoms stand in no relation to that of the primary symptoms developed at one time. That there are not more symptoms of general infection after two, three, four or five chancres, contracted at the same time, than after a single one, is proved by observations during six years, and cannot now be doubted.

These facts being once established, I reviewed all the ruptured venereal affections, whether primary or secondary. All the normal or morbid secretions, of persons reputedly syphilitic, have been examined by means of inoculation, and only one form has given uniform and constant results, and this form is the primary ulcer or chancre, which is to constitutional syphilis what the bite of the mad dog is to hydrophobia, does not nevertheless produce a specific pus, but at a certain period of its existence; and it is evident, that it is from not having paid attention to this simple fact, that the results of inoculation have been contested, or appear uncertain.

The primary syphilitic ulcer cannot always be the same in all its stages, and it cannot cicatrize, without first becoming a simple ulcer by the destruction of the cause which served to maintain it. Similar characters and results cannot be required from these different phases; it is in the period of developement or *statu quo* of the ulceration, whilst there is no effort of cicatrization, that a chancre secretes the venereal virus.

The specific nature of the secretion of chancre, as we have before said, does not depend upon the organ affected, nor the vitality, functions, or sympathetic reaction of this organ, nor upon the degree of inflammation which may attend the ulceration.

The locality has so little influence upon the peculiar nature of chancre, that it cannot justly be regarded as proper to the sexual organs. Indeed there is no part of the skin which may not become the seat of it; no part in the necessary condition and being accessible is secure from it. If it be developed on other regions than the sexual organs, it yet maintains, without exception, all its characteristic marks.

Thus a chancre, on the end of a finger, on the thigh, foot, or the tip of the tongue, will (if it has not been modified) produce pus capable of producing a similar chancre by inoculation, *without the participation of the sexual organs; whilst no other affection of these organs, whatever its form or extent, or the degree of inflammation which may accompany it, can reproduce a chancre.*

One circumstance, however, is undoubtedly true, and may have induced the error, viz. that the sexual organs are most frequently affected, like certain bones, which, from their texture and situation, are more frequently fractured than others. The delicate tissues of these organs, the facility of erosion of the epidermis or epithelium, the number and exposure of their follicles, the intimate and prolonged connection they maintain between a healthy and a diseased individual, are the conditions which permit the cause also to act with so much more effect. But, as experience proves, it is not the organ that gives to the disease its peculiar and specific nature; for no artificial lesion,

whatever the agent employed may be, can produce it; and whilst a finger deprived of epidermis, contracts a chancre by contact with the pus, the sexual organs being entire in every point, may be soiled with it unharmed.

Thus we have established this fact, that chancre, whatever its seat, is the consequence of a specific pus, which it alone secretes, and which justly termed, true leven (*véritable levain, ferment spicial,*) reproduces an identic disease *wherever it is suitably deposited.*

But this peculiar leven, which has only a peculiar action when it produces an ulceration,, is only generated during a certain period of a chancre, which, as we have seen, has two very distinct stages. The first, to which the name peculiarly belongs, is that of increasing or stationary ulceration, this is the one which furnishes the specific pus; at the second, which is the stage of reparation, it can only arrive by first becoming a simple ulcer; this is capable of cicatrizing, and no longer furnishes the specific virulent secretion.

The importance of the distinction of these two periods of chancres will easily be seen, for without it, all is confusion; and the same ulceration which produced a chancre by inoculation, not yielding contagious pus a few days later, one would conclude the experiments to be uncertain, where, in fact, they are of the greatest value.

If a little of the matter secreted by a chancre, during the period which we have pointed out, be taken upon the point of a lancet, and inserted upon the epidermis, we shall find the following result.

During the first twenty-four hours the punctured point becomes red, as in vaccination; the second to the third day, there is a slight swelling, and it has the appearance of a small papula, surrounded by a red halo; the third to the fourth day, the epidermis, elevated by a more or less turbid fluid, often assumes a vesicular form, with a blank point on the summit, caused by the drying of the blood of the little punctures; the fourth to the fifth day, the morbid secretion increases, becomes purulent, the pulsatory form is more defined, and its summit becoming more depressed, gives it an umbilicated appearance, which makes it resemble the pustule of the small-pox. At this period the aureola, which had increased in extent and intensity, begins to vanish or diminish; but from the fifth day, the subjacent tissues which have often hitherto remained unaffected, or were slightly œdematous, become infiltrated and hardened by the effusion of plactic lymph, which gives to the touch a sensation of resistance and elasticity, like certain cartilages; lastly, from the sixth day, the pus becomes more thick, the pustule cracks, and crusts soon begin to form. If these are not detached, they increase at their base, and rising in layers, assume the form of an imperfect cone, with a depressed summit. If these crusts be detached, we find beneath, an ulcer which being seated on the hard base we have mentioned, presents a ground whose depth is equal to the entire thickness of the skin, and whose greyish surface is formed of a fatty substance, or sometimes a pseudo membrane, which cannot easily be detached. The edges of the ulcer at this period cleanly

cut, as if by a perfectly circular punch, are yet undermined to a greater or less extent, and viewed with a lens, present slight indentures, and a surface similar to that of the ground; their margin, the seat of a similar *engorgement* and induration as the base, presents a kind of a red-brown, or more or less violet circle, which more projecting than the neighboring parts, raises the edges and reverses them a little, which in the first period gives a funnel-like appearance to these ulcerations.

These regular and constant signs, which form a general rule, the rare exceptions to which are easily explained, lead to the following propositions.

I. A chancre is not to be recognised, *a priori*, in all cases, either by its virulence or because it was contracted in a suspicious coition, or from its seat, the induration of its base, its color, the consistency of the ground, the cut, undermined or callous edges, or the tint of its margin, but by the pus which it secretes, and the vitiation of the system to which it may give rise, as all the above-mentioned conditions may vary, the secretion, and its general consecutive effects, remaining alone the same.

II. The pus of a chancre alone produces a chancre.

III. The best method of producing a chancre is by inoculation with the lancet.

IV. To produce a chancre, neither the orgasm of the venereal act, nor previous excitation of the part about to be inoculated, is necessary.

V. Inoculation never fails if the pus be taken in the proper state and well applied.

VI. The pus taken from a pustule, produced by inoculation, reproduces a chancre in the same manner, and so on from one to another, without limit.

VII. If several punctures be carefully made with pus from the same ulcer, each produces a pustule, and then a chancre.

VIII. The pustule and the chancre which succeed it, are developed upon the precise point of inoculation.

IX. Whatever varieties and complications the chancre from inoculation may present at a later period, its progress in the commencement is always the same as we have just described; the pustulous period is wanting only when the infected parts are denuded of epidermis, and it is only preceded by inflammation and abscess, when the virulent matter has been introduced into the subcutaneous cellular tissue or the lymphatics.

X. There is no incubation in the sense in which this word is generally used; for the evolution of the chancre commences at the moment of contact with the infecting pus, and continues till the formation of the ulcer.

XI. Chancre is at first a local disease.

XII. The symptoms of general infection, which can only occur when preceded by chancre, never appear when they do occur, except it has lasted a certain period.

XIII. To arrive at this important result we must distinguish the real from the apparent commencement of the chancre, viz. not reckoning from the day on which the patient first perceived it, but from the time of infection.

XIV. In making observations for this purpose, it will be found that ulcers, completely destroyed by caustic or otherwise, in the first three, four, or five days subsequent to the application of the cause, do not expose the patient to secondary inflammation.

XV. The induration of chancres only begins about the fifth day. Mostly they are indurated chancres which are followed by secondary symptoms, and this induration would seem to indicate that the venereal principle has penetrated the system, and as long as it does not take place, we may conclude that the disease is superficial.

It appeared to me very important to ascertain whether the specific matter produced by chancre, preserved its contagious properties for a certain time, like vaccine. Numerous observations, and amongst others, those of Hunter,* one would think no doubt left upon this subject; but this, however, is not the case, as we see by what the late Cullerier says upon it, in the great *Dictionnaire des Sciences Médicales*.

MEANS OF PROPAGATING SYPHILIS.

When it was first known that the disease was contagious, it was thought that it could be communicated by breathing the same air, coming in contact with the syphilitical, or even their clothes, that the meetings of christians for worship, &c. were frequent means of contagion. For this reason, no one concealed being affected with this disease; thus we hear of it being observed in virtuous princes and holy abbots.

The most common means of propagating syphilis, is undoubtedly that by the sexual organs in the intercourse between the sexes; because the virus generally has its seat in these organs, and because they are always moist, and the epidermis which covers them is delicate and thin, the organs remain in contact, and friction renders absorption more easy. The organs of the mouth are often the propagators of the contagion by a lascivious kiss, by the application of the lips or tongue to some part of the mucous membrane, by suction of the breast, and especially in suckling. If the mouth of an infant can infect a nurse, the breast of a nurse can infect a child.

These *alternative* infections are only too frequent. Hence arises a question—Is there any means of determining whether the disease has passed from the nurse to the child, or from the child to the nurse?

* Petit Radel says: This same deleterious matter, taken from the syphilitic pus furnished by chancres, being dried and preserved in a case, in the same manner as that of variola, and inoculated on the arm with a lancet long afterwards, produces venereal ulcers, preceded by all the symptoms of syphilitic inoculation. A soldier undermined by an old and obstinate syphilis, was thus cured.

If the disease exists in both individuals at the same time, and is arrived at the stage of consecutive disease, one can only form a probable opinion from the state of health of the father and mother, the child, and husband of the nurse, and from the time at which the disease showed itself in one or other of them, which is sometimes very difficult to ascertain. But one may be certain that the child has communicated the disease to the nurse, if it has ulcers in the fossæ nasales, tubercular pustules, in a scaly or ulcerated state in any part of the body, with marks of a disease already of long standing. On the other hand, we may be certain that the nurse has infected the child, if she has ulcers at the anus, pustules on the body or exostoses, and the child simply ulcerations of the mouth, nose, or anus.

A glass, spoon, or pipe, used by several individuals, may also be the intermediate means of contagion; but it is requisite that the contact with one should be immediate after the other; that the pipe left by the infected individual should have been directly afterwards taken by the healthy one; that the glass be not placed on the table, but passed from one to the other, or the spoon from one mouth to the other without being wiped. We have seen several indubitable instances of these different methods of communication.

The eyes may also be directly infected by a moist kiss upon the eyelids, or by a vehicle projected from a certain distance. The pus which spirts from a suppurated bubo when it is opened, if it touches the conjunctive, may produce syphilis and disorganize the eye.

The touching the hands or cheek of a healthy person by an infected individual, does not communicate syphilis; the skin is too compact, the epidermis is too thick for the virus to penetrate; but this would not be the case if there were any little ulcers, or a simple excoriation. Young surgeons dressing in the public hospitals, examining pregnant women by the *touché*, or aiding childbirth, have caught the disease with which the women were affected, by having slight excoriations from the little prolongations of the epidermis near the nail.

We think we may assert that the fluid which serves as vehicle for the virus, ought to possess a certain degree of warmth, or kind of life which gives the virus the power of attaching itself to the new bodies to which it has been transmitted. We confess our incredulity as to contagion, by means of a seat of a privy or a chamber-pot, which no one had used for several hours; or a sponge not used since the previous day; or by clothes which had been laid off a whole night by the wearer. Nevertheless we will not absolutely deny the possibility, if it be only to explain things which otherwise are inexplicable. I took pus from some chancres and inoculated pustules, which had been eight days in tubes, similar to those used to preserve vaccine. I have found that pus from chancres and inoculated pustules, after having been kept eight days in such tubes, produced the same result as recent pus. In the same manner I found that muco-pus of a gonorrhœa, a phlegmon, simple ulcers, and non-virulent bubos, kept in the like manner, produced negative results.

It is beyond all doubt, that women who have had connection with diseased individuals, have afterwards communicated the disease to other men, without becoming infected themselves. I have often met with such cases, and were they not so common, they might lead to the supposition of the spontaneous generation of syphilis between healthy individuals.

I lately saw a young man who had connection with a woman affected with chancres, and also the same day with his mistress, who became infected with the disease. The young man had not washed himself after the first connection, and his prepuce was very long, but he himself remained unaffected.

CHAPTER II.

INOCULATION SERVES TO DISTINGUISH FROM OTHER THE REPUTED PRIMARY SYMPTOMS OF SYPHILIS.

WHOEVER has taken the pains to study syphilitic diseases, has no doubt found that no affection is so ill defined, and no diagnosis so uncertain. What is syphilis? What are the symptoms? What symptoms are quite unconnected with it? These questions have not yet been settled, and are subjects of eternal dispute; until they are solved, no progress can be made with any certainty.

Must we include, under the head of syphilis, the symptoms enumerated by Astruc and adopted by Capuron? But then it would be impossible to admit a unity of principle, cause, and results. From having thus jumbled everything together, we remain in error. What conclusions can we draw from the observations of older authors and recent statistics of venereal diseases, as to the cause, effect, and treatment, when we see thrown together, under the name of syphilitical diseases, gonorrhœas *balanitis*, (external gonorrhœa of the glans penis,) orchitis, phimosis, paraphimosis, and many others, which have no connection with syphilis? The only conclusion we can arrive at is, that the diagnosis of syphilis is not only difficult, as Fabre and Peyrile have said, but impossible.

Let us see if inoculation cannot lead to something more positive than anything has hitherto done. In the first place, we will adopt the very natural distinctions made by Fernal between primary and secondary symptoms, or those with which the disease breaks out, and the consequences which it may afterwards produce. Let us first examine the symptoms which are called primary. They are:—

I. Gonorrhœa in its different situations.

II. Chancre or primary ulcer.

III. Bubo, considered as primary symptom.

IV. Mucous tubercle, or flat, humid, mucous pustule, said to be primary, &c.

What has caused these affections to be admitted as primary symptoms is, that they have been supposed to have been as the first symptoms which have shown themselves after an impure connection, and a consequent conviction that they indifferently produced the various symptoms of general syphilis. Identity of cause, identity of effect, is a doctrine professed by most practitioners of both the virulent and physiological school.

From the connection between cause and effect, Hunter, and then Abernethy and those who followed them, admitted true and pseudo syphilis. Others, like Carmichael, thought each separate form had a peculiar virus, and the so-called physiological school thought every thing depended upon the degree of irritation.

Here again we find doctrines founded on bad observations or false explanations.

SECTION I.

I asserted and proved, in the foregoing chapter, that chancre alone produces chancre; and yet most authors have admitted the existence of virulent gonorrhœas which were identic with chancre, of which they might be either cause or effect, and like it give rise to the whole train of symptoms of constitutional syphilis.

Whether gonorrhœa is identic with chancre, and whether like it, it constitutes a primary affection, by which syphilis may begin, is a question to which all authors have justly attached much importance, and it is well known that the most distinguished authorities have differed in opinion.

This dissention of opinion induced the Medical Society of Besancon to offer this as a prize question; and Hernandez, who justly concludes as to the non-identity of gonorrhœa and chancre, has so justly summed up all which inoculation can furnish on this point as a basis of differential diagnosis, that I must be allowed to transcribe part of his work.*

“Inoculation of the virus of gonorrhœa does not produce chancres.

“Andrée tells us, that a surgeon inoculated himself with gonorrhœal matter and had a chancre. This isolated fact is of little importance. It depends upon the assertion of an unknown surgeon. It is not stated whether this ulcer required mercurial treatment; and it would appear from this omission that they concluded, as to its syphilitic nature, merely from its appearance. We shall presently show how little external signs are to be depended upon in such cases. Even admitting the fact, a single case like this is far from not overturning, but even raising a doubt upon a mass of observations.

“J. Hunter has furnished a case of inoculation much more fully detailed, but at the same time far less conclusive. He inoculated gonorrhœal matter upon the glans and prepuce. Chancres made their

* *Essai analytique sur la non-identité des virus gonorrhœique et syphilitique; par J. F. Hernandez. Toulon, 1812, art. 4, p. 57.*

appearance on the points of insertion. Thus far it appears that the gonorrhœal virus produced chancres; but these chancres healed of themselves, which is by no means the nature of chancres and syphilitic ulcers.

“ In this case it is true we find fresh chancres appear and vanish of their own accord: symptoms apparently syphilitical, supervene; a bubo and after its resolution, ulcers of the throat, which healing, were succeeded by pustules; but the ulcers, the undoubted product of the inoculation, which ought to be characteristic, were not venereal. The bubo might depend upon the irritation of the ulcer on the glans, which we shall prove from Swédiaur. The ulcers of the throat and the pustules might also depend upon other causes. Moreover, this train of symptoms occupied three years in its development; how can we be sure that a new infection did not take place without the local affection, which produced these symptoms, being observed? Might not this patient have previously been affected with syphilis? The disease may have lain dormant in the system; an unclean connection may have communicated syphilis to him without any apparent disease. This Hunter does not tell us, nor did he even ascertain it. How can we then rely upon such an observation? Can we then reckon much upon the syphilitic nature of all the affections brought forward as syphilitical by great surgeons? It is plain that this point is important, in order to estimate the value of the inoculation, of which we are speaking, and whose syphilitic results only relate to the nature of the consequences it offers.

“ One tooth being replaced by another, Kuhn observed an ulcer in the mouth, and sometime after, a cutaneous eruption following, he considered it a syphilitical affection. The celebrated Lettsom, to whom he communicated the fact, was of the same opinion. Yet upon the tooth being extracted, all disappeared.

“ We see from this circumstance how readily the venereal nature of an affection was admitted at the time the authors wrote, and therefore how little conclusive the observation of Hunter ought to be considered, and how little it decides the question.

“ Bell relates, that two young men tried some experiments with inoculation upon themselves. The glans and prepuce, scarified with a lancet and then rubbed with gonorrhœal matter, became covered with small ulcers, which had no resemblance to chancres, and healed without mercury.

“ These positive facts contradict the former. They are far more decisive, because some circumstance may have been combined with the inoculations of Andrée and Hunter, which may have transformed the result into something, other than would have been the natural product of the inoculation. In those of Bell, the matter is more clear and less involved in doubt. If the inoculated virus be syphilitical, the ulcer must be venereal, as soon as it is formed. We know nothing which can alter the nature of the ulcer produced by the syphilitical infection, or prevent it assuming its essence and character. It is there-

more evident, that if inoculation produce ulcers which are not syphilitical, neither could the infecting matter be so; and we necessarily conclude, from the experiment of which Bell speaks, that the gonorrhœal virus producing ulcers, which are not syphilitical, has a different and peculiar nature.

"Thus far the observations in favor of the production of chancres by inoculation of the gonorrhœal matter, are few and undecisive. In the host of circumstances, which may complicate the ulcers produced by inoculation of gonorrhœa, and even render them venereal, who would venture to assert that two single indubitable observations, in which the ulcer obtained might be truly venereal, could afford a sure and affirmative solution? But nothing has proved the venereal nature of the ulcers produced by the inoculation in André's case, and all unites to show that that of Hunter had no syphilitic result.

"By the side of these dubious or even favorable observations, we can place direct and decisive cases, which prove that the ulcers produced by inoculation of gonorrhœal virus, are not syphilitic. We are therefore obliged to conclude, that the gonorrhœal virus has a peculiar nature, strikingly different from the syphilitic virus.

"After all these experiments, I shall relate some which I was enabled to make under very favorable circumstances. The work of Bell being found on board a prize, was sent to me, in 1794. I took advantage of being in attendance at an hospital for galley slaves, to make some researches. I prevailed upon some convicts, who dreaded the work at the Arsenal, to submit to some experiments, in which there could be no danger.

"Many of the convicts had gonorrhœas; I selected three to furnish the necessary virus, I kept them several months, during which time I made many experiments. Three healthy men in the prime of life were repeatedly inoculated on the glans and prepuce. Several threads dipped in gonorrhœal matter were laid upon incisions made with a lancet. Slight ulcerations always followed without having the appearance of chancres, and they healed with the most simple dressings.

"Two others, who had great tendency to scurvy, although it had never broken out, had some obstinate ulcers, which resisted all local applications, and only yielded to exitants combined with acids. One of them had pains all over his body; the pus of the alcer was bloody, and the flesh of a fungous nature.

"Four young men, formerly afflicted with scrofula, and still having a scrofolous habit; in three of them, the ulcers were very obstinate; in two they possessed nearly all the syphilitic characters, and an herpetic eruption made its appearance a short time after. In these two, there was some abdominal obstruction, which could only be removed by the internal use of calomel. Nevertheless there was a certainty of the affection not being syphilitic. One had been in the baths three years, the other two, and neither had been allowed to quit the Arsenal.

"A young man, whose parents were afflicted with the gout and who

seemed predisposed to it, was inoculated in the spring. An ulcer was produced, the damp weather made it yet worse, it was accompanied by vague pains and all the derangement caused by weakness of the digestive organs. It resisted all remedies, but the warm weather setting in, it healed quickly.

“A man about fifty years of age, subject to hæmorrhoides, which gradually disappeared, just at this time the inoculation was made and the ulcer assumed quite the syphilitical appearance and only healed when the hæmorrhoidal flux returned.

“Out of six individuals of a sickly irritable constitution, four had obstinate ulcers, and two had even pains and cutaneous eruptions. These obstinate ulcers, whether accompanied by pains and the eruption or not, only yielded after a long course of internal tonics; the other two recovered easily with only simple dressings.

“These experiments were made upon seventeen persons, they are the most numerous, and perhaps the most careful that have been made, and furnish important results. In five of these cases, we see that the cure was quick and without internal remedies, and without the ulcers having a syphilitic appearance. In the others, we had obstinate ulcers, some of them possessing quite the syphilitical appearance, accompanied with general symptoms, which seemed to confirm it. Surely such proofs did not exist in the cases I quoted, and yet they were regarded as decisive. Yet all depended upon known internal disorders; all the ulcers yielded to means calculated to destroy these disorders, but which have no virtue against syphilis. I might have been deceived had I not chosen my patients, and well examined the state of their health. The scrofulous subjects with abdominal obstructions might have led to error. Here we had the symptoms of ulcer, cutaneous eruption, and the efficacious effect of mercury! What reasons for admitting the existence of the syphilitic virus, had the disease not been previously recognised, but made its appearance at the same time, or shortly after, and had not other patients, with similar affections without ulcers or venereal symptoms, experienced the good effects of this treatment!

“My experiments prove that the ulcers, which are produced by inoculating the gonorrhœal virus, are not syphilitic, and at the same time point out the source of errors which may render these experiments, which appear so simple and decisive, of little value. They show how circumstances may change the nature of ulcers or disguise them, and to such a degree that it may easily impose upon inattentive observers who do not foresee these cases of complication.”

I will here relate some experiments which were made in Philadelphia. “Dr. Barton, says Dr. Tongue, to whom we are indebted for them, inoculated me on the arm with matter from a very virulent gonorrhœa, and no inflammation even ensued.

“My fellow-student, Mr. Rowan, was also inoculated with the same matter upon the right arm, neither did any inflammation result here. The same was the case with Mr. Thompson and a servant.

“ Three weeks afterwards, the operation being repeated with some fresh gonorrhœal matter upon Mr. Tongue’s fore arm, and a fortnight later, in the same place, upon Mr. Rowan, produced neither chancre nor inflammation.

“ Two pieces of lint, well soaked in gonorrhœal matter, of the virulence of which no doubt remained, were applied behind the glans under the prepuce, and remained there two days and a half, neither chancre nor inflammation ensued.”

These experiments by Dr. Tongue are exact. Inoculation, far from producing a chancre, did not even cause any inflammation. Yet the introduction of this matter into the cellular tissue, in the midst of this net-work of absorbents, which are here so plentiful, placed it in the most favorable position for its action.

But perhaps it may be objected, that this is not the ordinary manner of the transmission of syphilis, and that it is this which has caused it to fail in its effects.

We know that an excoriation or incision particularly favor the action of the venereal virus, of which we give numerous proofs in this work. But we have upon this subject, and by the same means, some very decisive experiments by Dr. Tongue.

He inoculated his fellow-student, Mr. Wotton, on the right arm with syphilitic matter, taken from a chancre an hour previous. The part gradually inflamed, and a complete chancre was formed in the space of four days.

He inoculated a person with pure syphilitic matter, mixed with an equal quantity of a solution of gum arabic, the proportions of which were two drachms of gum to eight ounces of water; the chancre was developed as usual.

Having tied up a dog, apparently in good health, during four and twenty hours, he obtained a small quantity of the gastric juice, a part of which he mixed with some pure syphilitic matter, he introduced it into the left arm of a young negro; the chancre was formed in three days.

The same experiment was performed upon another individual, with a similar result.

The gastric juice was mixed as soon as possible after having been taken from the stomach.

He inoculated a man on the right arm with equal parts of syphilitic matter and a solution of sulphate of copper, in the proportion of a scruple to the ounce of water; the chancre made its appearance.

At the same time he inoculated the same person on the left arm with syphilitic matter, and an equal quantity of a solution of sulphate of iron, in the proportion of a scruple to the ounce of water; and here again the chancre was formed.

In these experiments, we find the syphilitic virus, mixed with equal quantities of a fluid, (and therefore diluted,) invariably produce chancres. In the latter, even when added to medicaments or energetic substances, it was always followed by syphilis.

Dr. Harrison, also, made some inoculations with chancre pus; an ulcer and syphilitic symptoms were the result.

Upon surveying carefully all the experiments relative to inoculation, we find some amongst those we have quoted which might undoubtedly be questioned, or whose consequences have been ill deduced, without however detracting from the regularity and precision of inoculation.

The researches I have made in public, during more than six years, must be entirely satisfactory to all unprejudiced minds, and will explain all that may appear somewhat contradictory in different authors.

In the first place, I studied gonorrhœa as regards its causes, and I found that it could be produced under the influence of all those which generally preside over catarrhal inflammations; so that once developed, it was impossible, from its own symptoms, to determine to which it was really owing. It may, however, generally be said, that if we can trace a discharge to the source, it has been found that it was produced by another discharge, and that thus the catarrhal muco-pus seemed to be the most efficient irritant to produce the inflammation of the mucous membranes. Yet, the virulent pus, secreted by a chancre, frequently produces a gonorrhœal discharge; but then it is easily to be perceived that the action of this cause, differing according to certain circumstances, has not always been well explained, as we shall see a little further on.

Nevertheless the most distinguished authors have asserted and been convinced, that one woman having connection with several men, could give chancres to some of them and to others gonorrhœas and bubos; whence they have concluded, as to the identity of the nature of these different affections, the principle being always the same in all, and the difference being only in the form determined by the locality and the degree in which the cause acts.

If such reasoning has remained for a length of time without refutation, it cannot now be persisted in. Since I have applied the *speculum uteri* to the study of venereal diseases, the hitherto inexplicable enigmas are reduced to the commonest and most simple facts. With the aid of this instrument, I have found that a woman may be affected at the same time with gonorrhœa and chancres in the depth of the vagina or uterus, and the gonorrhœa alone show itself externally; so that apparently affected with gonorrhœa, she could easily give chancres and gonorrhœa, or only one of them, according to the predisposition of the persons who exposed themselves to the infection. But we can affirm, and from numerous observations, that whenever we have examined women, who have communicated disease, we never found that a chancre had been produced by a discharge without ulceration in the sexual organs of the person who had communicated it. Inoculation has confirmed what observation of ordinary contagion, better made with the aid of the *speculum*, had established.

In women, gonorrhœa in the whole extent of the organs of generation, in its different stages, acuteness, and duration, being inoculated in the same manner as employed for chancre, produced no result, whenever the mucous membrane was not actually the seat of a chancre,

It is now well known, and proved by pathological anatomy, that, as the speculum shows us every day, gonorrhœa is often accompanied or followed by erosions, or more or less extensive destructions of the mucous membranes; but the ulcerated form of gonorrhœa, if I may thus express myself, does not render it more capable of being inoculated than that which is not; the gonorrhœal ulcers being essentially distinct from chancre. The observation which my learned colleague, M. Gilbert,* has related, as opposed to my doctrine, in fact proves its validity.

“ I do not think the inoculation proposed by M. Ricord, as a means of diagnosis, can really be had recourse to with advantage; for this inoculation has never succeeded in producing characteristic syphilitic symptoms, either in my hands or in cases, where it seemed no doubt could possibly exist as to the contagious nature of the disease. Late-ly a girl, with an acute urethral and vaginal gonorrhœa, with a granulated ulceration of the neck of the uterus, was inoculated with the matter of the discharge in my wards, without success. There were nevertheless all the conditions which, according to M. Ricord, could favor the inoculation.” No, here were not all the circumstances likely to favor the inoculation; on the contrary, the granulated ulceration could not inoculate, and this is what occurred; for ulceration in this condition can never inoculate.

But if it were proved that a chancre could never be produced by muco-pus taken from the sexual organs of a woman; if it were shown by the speculum that no ulcerations of this kind existed any where, we might conclude, as I have done, from the strictest analogy and the soundest logic, that whenever the urethral gonorrhœa of a man communicated a chancre to a woman, there must have been something else than a gonorrhœa, and that the urethra was the seat of a chancre in some portion of its extent.

Yet this doctrine has been doubted by some uncandid opponents, who would not admit the chancres in the urethra from a curious reason, viz. because they had never seen them, as if each individual could have seen all; but what is still more strange is, that every kind of ulceration has been denied and the power of ulcerating, under the influence of causes which produce ulcers in all other mucous membranes, is denied to this canal, because Morgagni never found any ulcerations in gonorrhœa. Morgagni, who observed chancre, in the meatus urinarius and cicatrices in the urethra, which must have resulted from some previous destruction; and because Hunter found no ulcerations in the urethra of two men who were hanged, when affected with gonorrhœa; and lastly, because M. Cullerier and M. Philip Boyer, each made a dissection and found an ulcerated mucous membrane. It is but just to remark, that M. Cullerier has assured me, he never thought of concluding from the dissection he made, that the urethra was not susceptible of this kind of disease. It remained to be shown,

* Gilbert Manuel, des maladies, vénériennes. Paris, 1836.

by a series of observations, and the aid of pathological anatomy, that this canal, which was so often seen ulcerated at the meatus urinaris,* and in the anterior portion, might be so in any part of its extent, and apparently afford only symptoms of gonorrhœa.

In those cases related by some authors, and which appear to me incontestible, where chancre pus introduced into the urethra produced a gonorrhœa, two things are possible, either the matter of the chancre only acted as a simple irritant, causing a discharge, or in a specific manner, causing a urethral chancre, which, from its situation, could only occasion symptoms of gonorrhœa, constituting what I have termed masked chancre; (*larvé*) for if it be true, that with chancre pus a discharge has been produced, yet no other affection can be produced by the muco-purulent secretion of gonorrhœa, from a mucous surface not affected with chancre.

Bell† (vol. 1, p. 492) relates the following cases:—

“Two young students of medicine, having resolved to settle the point in question, determined to make the following experiments, at a time when neither of them had been affected with gonorrhœa or syphilis. In these experiments, as in the preceding, the matter was taken from patients who had never taken any mercury. Each of them placed between the prepuce and glans, a bit of lint impregnated with the gonorrhœal matter, and allowed it to remain in the same place during twenty-four hours. They expected to see chancres spring up, but in one, a great degree of inflammation followed, with all the appearance of what is called bastard gonorrhœa. A considerable quantity of fetid matter flowed from the inflamed parts, and for some days it was feared recourse must be had to an operation to cure a phimosi. However, by means of bread cataplasms, with solution of acetate of lead, laxatives, and a severe regimen, the inflammation subsided, the discharge ceased, no chancres appeared, and he was soon quite well again.

“The other was not so fortunate; the external inflammation was but slight; but the matter having gained access to the urethra, he was attacked the second day with a considerable degree of gonorrhœa, which lasted long enough to cause him much agony, and he did not get quite rid of it for a year.

“He was thus convinced of the imprudence of making similar experiments, and was not tempted to prosecute them, although they were ardently continued by his friend, who shortly after the inflammation from the first experiment had subsided, introduced some gonorrhœal matter on the point of a lancet, and also into the substance of the glans; but although he repeated this operation three times, no chancres were produced. There only followed each time a slight degree of inflammation, which disappeared without any application to it. His

* Astruc, Frank, Bell, Wiseman, Howard, Capuron, Spangenberg, Swédiaur, *Traité sur les maladies vénériennes*, p. 136, Thomas Bartolin, Lisfranc, Fourcroy, Teytau, &c.

† Not having the above work to refer to, I was obliged to re-translate the passage. H. D.

last experiment was attended with more serious consequences. He introduced the suppuration of a chancre on the end of a probe, to the depth of three or four lines into the urethra: no symptoms of gonorrhœa appeared; but in the space of five or six days, he perceived a painful inflammatory chancre on the spot where he had applied the matter. To this affection succeeded a bubo, which suppurated, notwithstanding the immediate application of mercury, and the wound which resulted from it became very considerable, and healed slowly; ulcers of the throat followed, and he could only be cured by a considerable quantity of mercury, and was unable to leave his room for nearly a month.

“I was, by these experiments, enabled to produce the most decisive proofs that it could be desired, of the difference between the matter of gonorrhœa and syphilis, and to show neither chancres nor other general symptoms can be produced by the matter of gonorrhœa, whilst that of syphilis, even to the secreting surface of the urethra, produces chancres, which afterwards introduce the infection into the system.”

We may add to the facts mentioned by Bell, that one named Valentin, quoted by Freteau, tried several times without success to inoculate himself with a gonorrhœa, without producing either chancres or even a discharge.

It has been thought that the only difference which existed between chancre and gonorrhœa, was owing to the greater or less concentrated degree of the virus; thus forgetting this fundamental law of syphilitic diseases, that the intensity of the symptoms is never dependant on the acuteness of the disease in the person who infects, but in the person who is infected. Supposing variations in the strength and power of the virus, and the existence of superficial* and more penetrating syphilis, the virus of chancre in losing its strength would only be capable of producing gonorrhœa, which would be contrary to the opinion of Swédiaur, who considers ulceration as the consequence of a less degree of irritation; but in this case, how can the virus, weakened in these, in its turn reproduce a chancre? In a more absurd explanation, it has been thought that the mucous membranes, affected with gonorrhœa, did not ulcerate, because the virus was enveloped in mucus. (Hufeland.) It is very possible that virus, thus incarcerated, might have no action upon a healthy mucous membrane, but that it should produce ulcerations precisely there, without affecting those which had secreted it, or at least the neighboring or contiguous parts, is far too irrationable. M. Lagneau's theory, according to which a gonorrhœa only produces constitutional syphilis, when a part of the mucous membrane remains sound, to absorb the virus which is secreted by the infected part, is indeed not more admissible, particularly as experience teaches that the syphilitic virus cannot flow over the skin or a healthy mucus membrane, without infecting it directly. As regards Swédiaur's opinion, that gonorrhœa ulcerates the tissue to produce general infection, it may be re-

* Some other authors, and amongst others M. Lagneau, give this synonym to gonorrhœa.

duced to this proposition: that chancre alone can produce secondary symptoms.

It has been thought that the cause of chancre and gonorrhœa being the same, the difference in the form depended upon the tissues affected, and that thus the syphilitic virus applied to a non-secreting surface produced a chancre, and the pus of chancre upon mucous membranes only, produced gonorrhœa.* We know that gonorrhœal matter never produces chancre on the skin, and that applied to mucous surfaces, when it acts, it only produces a discharge.

The gonorrhœal secretion, applied to the mucous membrane of the eye, has never produced chancres of the conjunctiva or eyelids, *nor has the muco-purulent secretion of gonorrhœal ophthalmia (ophthalmie blennorrhagique) ever produced chancres by inoculation or otherwise*, although the eyelids are susceptible of being infected by chancre. We may add, that the muco-pus of a balantis, &c. the consequence of an impure coition, or produced artificially by an irritant, has never furnished a result by inoculation, and that these affections therefore cannot be followed by symptoms of constitutional syphilis, whenever they have existed, without chancres.

Without, in this place, entering into the discussion and history of all the symptoms which have been attributed to gonorrhœa, there are two which are pretty frequent and regular, as consecutive symptoms; these are buboes, (yet far less frequent than after chancre,) and swelled testicle (epididymite).

I have ascertained by inoculation, that the pus from buboes which are consequent on gonorrhœa, does not inoculate, even should they terminate in suppuration, which is rarely the case, they otherwise partake only of the nature of an engorgement or simple abscess, whose characters frequently correspond to strumous, and not syphilitic affections.

As to swelled testicle which, still more rarely suppurates, the pus never produced anything by inoculation.

The observations made upon gonorrhœa, during my researches upon inoculation, lead to the following propositions—

I. The matter of a gonorrhœa, applied to a healthy mucous membrane, causes gonorrhœal inflammation so much the more easily the nearer it approaches the purulent form, and therefore, contrary to the opinion of Wathely, the less mucous its nature.

II. Under no circumstances can it produce chancre; but as an irritating matter, like that of coryza for instance, it may excoriate the skin, with which it remains some time in contact, but it never produces a specific ulcer. Convinced of these truths, which were so often verified, one of my pupils, M. Léon Ratier, often inoculated himself with

* The pus furnished by a well established chancre, is sometimes sufficiently abundant to spread to the neighboring parts; when it is situate at the glans or interior of the prepuce, it inflames and sometimes excoriates these parts, causes even new ulcerations, which soon produce fresh symptoms, in particular phimosis.

the muco-pus of gonorrhœa upon the skin of the fore arm, without any results.

III. The consecutive, undoubted, and regular symptoms of gonorrhœa, do not furnish an inoculable pus.

IV. The symptoms of constitutional syphilis, are not the consequence of gonorrhœa. In all the cases in which authors mention that it was an antecedent, the frequency of which precisely corresponds with that of masked chancres, (chancres larvés,) the diagnosis was not correct; the diseased surfaces not having been examined.

V. Lastly, the only correct means of diagnostic, in the present state of science, is inoculation. Every gonorrhœa which is tested by inoculation in its various periods, without producing any result, is only a simple affection, and incapable of communicating syphilis, whether primary in another subject, or constitutional in the one first affected.

After having proved that gonorrhœa and chancre are two entirely distinct diseases, as regards their cause, form, and consequences, it remains for me to examine the other reputed primary syphilitic symptoms.

SECTION II.

Chancre, the inevitable consequence of the application of the syphilitic virus, either to the skin or mucous membranes in the proper state for inoculation, often presents such varieties in its material aspect, that it seems to constitute different diseases.

These differences in chancre, being ill known, or not duly appreciated, have been for some, an argument against the identity of the venereal virus and its unity of action, and for others, the proof of the existence of a plurality of the virus; but if well studied in its cause, which always remains the same, in the manner of its development and its consequences, in regular and uncomplicated cases, the apparent differences are easily explained, and all contradictions disappear; for, whatever may be the actual form of the chancre from which the pus is taken, provided it be taken during the period which I have before pointed out, a regular characteristic pustule is obtained, when the virulent pus is inserted under the epidermis or epithelium, an immediate (*d'emblée*) ulcer when it is applied to denuded tissues, or an abscess when it is introduced into the cellular tissue, a lymphatic vessel, or ganglion.

Always keeping in mind the difference produced by the seat, and the particular tissues affected, we yet find an identity of appearance and regular characteristic features in the ulcer at its commencement; and that too, whether it be the consequence of the rupture of the pustule, the opening of a virulent abscess of the cellular tissue or lymphatic ducts, or whether it have arisen immediately (*d'emblée*.) The deviations or peculiar forms only develop themselves after, and under the influence of circumstances foreign to the specific cause, such as:—the peculiar constitution of the patient, his former or concomitant

diseases, and the general and local treatment to which he has been subjected. From this cause we see patients affected with phagedenic chancres, who have contracted their disease with persons who had apparently only benignant ulcers; and the vulgar opinion entertained by many practitioners, that a virulent affection must have been contracted with a very diseased person, is entirely false.

Inoculation has placed the regularity of the commencement of chancre in its different forms beyond all doubt, and explained its deviations.

It is, as we have seen, inoculation which has enabled me to distinguish these two very distinct periods of chancre, viz., the period of ulceration, which may be still increasing or arrived at a stationary state, in which there is a balance between the nutrition and source of ulceration; and the period of reparation, either by passing to the state of a simple ulcer, or to the transformation *in situ*, or to *secondary symptoms on the spot* (*symptôme secondaire sur place*.)

The period of the specific ulceration is unlimited in its duration, preserving the characters of the primary ulcers; thus I was enabled to inoculate the pus furnished by ulcers which had already existed eight months. The different periods of chancre may always be determined by inoculation.

If inoculation has already furnished us curious and important results, the history of buboes will be yet more interesting.

SECTION III.

The bubo, so frequent a symptom of venereal diseases, and which was so well described by Guillaume de Plaisance,* although Astruc considered it as one of the symptoms which has only been attendant on syphilis from a recent epoch, was not always well known to the ancient writers on syphilis, which explains the singular assertion of Astruc, nor even to the authors of our own times, as may be seen by the writings of modern authors, and the objections which have been made to my researches.†

* Guillaume de Plaisance wrote in 1343.

† "The pus formed in the buboes which accompany ulcers, whether primary, or secondary, or gonorrhœa, may be introduced under the epidermis, or epithelium, with impunity." M. M. Cullerier et Ratier, article Inoculation, Dict. en 15 vols.

"Inoculation has been proposed as a means of diagnostic between sympathetic and syphilitic buboes; most experimentators, amongst others M. Cullerier, obtained nothing by the inoculation of the pus of buboes, which it was most natural to regard as syphilitic. M. Ricord, on the other hand, says he has obtained the characteristic pustule whenever the bubo was united with a chancre, or a vaginal discharge, which took its source from ulcerations of the neck of the uterus. The few experiments I have made, or seen performed by my friend and colleague Dr. Manec, afforded, like those of M. Cullerier, a negative result. As most of the buboes in women terminate by resolution, the cases in which inoculation would be practicable, are very limited." M. Gilbert, manuel des maladies vénériennes. Paris, 1836.

M. Ruef, of Strasburg, has also said that all buboes were not capable of being inoculated, without mentioning the cause of this difference, although he was present at my experiments, which he probably did not recollect.

Inoculation, applied to the study of this symptom, has established, by experiment, the following species:—

I. A bubo may be simply inflammatory.

(a) By propagation of the inflammation by continuity, without regard to the particular nature of the primary affection which produced it, whether this was a gonorrhœa, a chancre, or other lesion.

(b) By sympathetic reflection.

II. Virulent, that is, owing to the direct absorption of the specific pus of syphilis, and in this case, it is strictly the consequence of chancre, the pus of chancre alone can produce it.

III. Superficial or profound, or present these forms at the same time.

IV. Seated in the cellular tissue, the lymphatic vessels, or ganglions, separately or differently combined.

V. Chronic or acute.

VI. Preceded by other symptoms termed primary, or show itself immediately (*d'emblée*).

VII. When other symptoms have shown themselves before it, it may succeed them immediately, and then be only a successive symptom, or only manifest itself at the period of general symptoms of syphilis, and constitute the secondary bubo.

After having convinced oneself of the truth of the divisions which I have just established, we are astonished to hear otherwise learned and candid men say, that my experiments of inoculation, as regards buboes, have no value, as they have found them sometimes succeed and sometimes fail; and, consequently, as a bubo does not always inoculate, inoculation is an uncertain means, either of proving, as we have said elsewhere, the existence of the virus, or of diagnostic; not perceiving that this pretended uncertainty of inoculation, was what established its absolute value.

Whenever an inflammation of the cellular tissue, or lymphatics of the inguino-crural, or other region, have been the consequence of any other cause than chancre, if suppuration has supervened, it has never produced anything by inoculation, in whatever may have been the period or the conditions in which the pus was taken. Thus it is, for example, that when a bubo had been preceded by a gonorrhœa, it never, when it came to a state of suppuration, as we before said, furnished an inoculable pus; only when a bubo is preceded by a chancre, can it furnish a specific pus capable of inoculation. But because a chancre has preceded a bubo, it does not follow that it will afford a specific pus; in this case, the bubo must not be the result of a simple inflammation from sympathy or succession, but there must have been absorption. Absorption, when it takes place from a chancre of the sexual organs, only occurs in the *superficial ganglions*, and most frequently in one at a time, although several ganglions, either superficial or deep seated, may be inflamed or swollen at the same time,* so that

* If the name of bubo be applied to every glandular engorgement, which may occur in the neighborhood of parts actually affected by a reputed venereal affection, the division

one ganglion presents all the characters of a virulent bubo, whilst the neighboring ganglions, in which the inflammation may come to supuration, as well as in the surrounding cellular tissue, only present a simple and non-virulent character.

I was some time in recognizing these conditions, and in explaining to myself why all buboes did not inoculate, as asserted by those who have repeated my experiments, without being well acquainted with them; and how it happened that a bubo, whose pus did not inoculate one day, often did the next; or that in a bubo with separate centres, and which might be called multilocular, one of these centres furnished an inoculable pus, and the others not.

I then began to make my experiments more precise, and I first inoculated all the buboes at the moment of opening them, with the first pus which escaped, and the result was negative, which explained to me the assertion of M. Cullerier, who had perhaps only made his experiments under these circumstances, or in cases of simple buboes. I then took pus from the same buboes, two, three, four, five days and more, after the opening, and then it gave, in many instances, positive results, and in others, inoculation continued to produce nothing. In the first case, the centre, (foyer,) as well as the edges of the opening, soon assumed the character of chancre, whilst in the second, the abscesses followed the march of simple phlegmonous or lymphatic abscesses, progressing towards healing.

However, there remained an important question for me to decide, viz., whether in the cases where the pus of the bubo did not inoculate at the moment of being opened, it would acquire its inoculating quality by contact with the air, or by becoming subsequently mixed with the pus of a pre-existing chancre, or in any other manner. The solution still appeared very difficult, when a patient presented himself to my notice, with a bubo consequent on a chancre, and a copious supuration. I opened the abscess; but after having evacuated the pus of the cellular tissue, I found, in the midst of the centre, a very large lymphatic ganglion, with evident fluctuation in its centre. I opened it, and made with the pus it contained an inoculation, and a similar one with pus taken from the surrounding parts, viz. the cellular tissue; and, whilst the pus taken from the ganglion produced the characteristic pustule, that from the cellular tissue remained inert. I was then convinced that the difference did not depend upon chance, or things which only occurred after the opening of the buboes, but upon the pus not having been sought where it was situated. After this observation, I made a series of experiments, which left no further doubt as to the results of inoculation.

of buboes into superficial and profound, is correct; but if only those be considered syphilitic buboes, which are the result of the direct absorption of pus, there only exist superficial buboes, and the opinion of my colleague and friend, M. Philippe Boyer, is correct. (*De la syphilis. Paris, 1836.*) As in the study and treatment of buboes, there are other things to be attended to beside the syphilitic virus, this distinction of profound and superficial buboes, upon which M. Desruelles particularly insists, ought to be adhered to and studied with care.

I then selected some buboes in which the suppuration was well advanced, and which had been preceded by chancres. I made an inoculation with the first pus which escaped at the moment of opening, and then emptying them as completely as I could, I sought in the depth, by the help of a great opening and in suppurated ganglions pus, to inoculate in its turn. The results were like the first: with the superficial pus, nothing; with the deep seated pustule.

However, it is easy to be imagined, that in a case where suppuration has existed a long time, the virulent ganglionic pus may become to the surface, or be mixed in sufficient quantity with the surrounding phlegmonous pus, for this to inoculate at the moment of the opening, which in one observation seemed to be the case. Thus it being difficult to separate the layers of simple from those of virulent pus, it is easily to be understood that apparently contradictory results might be found; but the number and regularity of the experiments I have made, more than suffice to remove every doubt.

The same results have been obtained with pus taken from the origin of the lymphatic vessels. We frequently see the lymphatic vessels inflamed in their whole extent, between a chancre and the ganglions, in which they terminate. The disease of the lymphatic vessel may take place without the ganglions being necessarily affected. A chancre may even exist on one side and occasion a bubo on the other; in which case, the absorbent vessels may remain healthy or become engorged, marking their course from one side to another, crossing the median line. Whenever the inflammation of the vessels terminate in suppuration, and is the consequence of absorption of chancre pus, it has in its turn furnished an inoculable pus.

We have already seen that the phlegmonous bubo, or the simple suppuration of the cellular tissue, if the source did not afterwards become infected by contact with virulent pus, proceeding from some part and generally from the opening of a contaminated ganglion or lymphatic vessel. There may be, however, abscesses of the cellular tissue, primarily virulent; they are generally situated very near the chancre and are produced by the infiltration of the pus underneath the skin and subcutaneous cellular tissue. An indurated *corde* is in this case often felt between the chancre and the abscess, which might be taken for a lymphatic, but is in fact only indurated cellular tissue. These abscesses inoculate the very moment of their being opened, and with all the pus they contain, without distinction.

When the profound ganglionic engorgement, called deep seated buboes, suppurate, which is far more rarely the case than in superficial ganglions, the pus they furnish never inoculates, unless they be subsequently soiled with matter from a neighboring chancre, or an infected superficial ganglion; but in this case, the deep ganglions are never infected by way of absorption. It may be positively asserted, that the absorption of the virulent pus, preserving its capability of being inoculated, does not pass the first ganglion by direct means of absorption from the chancre, to which the bubo succeeds.

A question of the greatest interest, which has not always been answered in the same way, is the existence of bubo, as primary symptom (*d'émblée*.)

Do primary syphilitic buboes, in the strictest sense of the word, really exist; that is, without any antecedent than an impure coition, and without concomitant symptoms, to which they might be attributed? Men of equal celebrity have replied in the negative, and in the affirmative to this question.

If the patient be closely and minutely questioned, one will soon be convinced that the reputed primary buboes are very rare; for most frequently in those which were supposed to be such, we find the cause so evident that we are surprised that the patients themselves did not perceive it; thus patients, who have only become aware of their disease by the development of a more or less painful tumor at the anus, will only speak to you of this tumor, which they only perceived the day previous, or even that day. If you interrogate them, they state the last coition to have been a fortnight, a month, or more, previous; if they be then examined, a chancre will be found, often pretty extensive, upon the penis, prepuce, or some neighboring part. Yet, after an unclean connection, the engorgement of the ganglions, situate near the sexual organs, become, though rarely, primarily diseased. There are some circumstances in which it is impossible to find any suspicious antecedent or concomitant, and we are then obliged to admit the existence of the primary non-consecutive bubo (*bubo d'émblée*).

If these engorgements be attentively examined, without being led into error by those which may resemble them, it will be found that they generally make their appearance in the deeper ganglions, and not unfrequently even in those of the fossa ilica, or at least the subaponevrotic of the thigh; that their progress is often chronic; that they are a long time indolent and have little tendency to suppuration; but what is most remarkable, is that when they suppurate, the pus they furnish does not inoculate: hitherto I have never found a bubo with all the rational signs of a nonconsecutive bubo, (*d'émblée*,) which furnished an inoculable pus. If to this important observation be added, that after very careful researches, I have never found that a strictly speaking non-consecutive bubo has been followed by symptoms of general syphilis; the importance of inoculation in this case will be apparent. Moreover, as regards absorption in general, the lymphatic vessels must have orifices, opening on the mucous or cutaneous surfaces; for under the hypothesis, according to which absorption must be preceded by a kind of imbibition, the tissues which are impregnated with pus would be first infected, as this pus necessarily produces ulcerative inflammation wherever it penetrates, except in the lymphatics, when their internal membrane is entire; for if this be not the case, we see them attacked, as in the case of lymphitis, to which we have already alluded.

In the present state of science and our experience of inoculation, applied to the study and diagnosis of bubo, we may conclude:—

I. That the virulent bubo, or that from the absorption of the pus of

chancre, is analagous to chancre, as regards its nature, and only differing in its seat.

II. That the virulent bubo is the only one which inoculates.

III. That the signs, without exception, which have been pointed out by authors to distinguish virulent buboes, from the engorgements with which they might be confounded, only serve in most cases to establish a rational or probable diagnosis; and that inoculation alone can be considered as an unexceptionable and pathognomonic sign.

IV. That if in a great many cases of supposed non-consecutive bubo, an exact diagnosis were not absolutely necessary to regulate the treatment, and determine the prognosis of the future chances of the patient, when suppuration does exist, it ought to be tested at every period of its duration; experience having shown that buboes, which do not inoculate, (*when the experiment is properly made,*) are never followed by secondary symptoms, and that they are therefore not syphilitic; whilst other causes, which often escape our notice, and without being connected with syphilis, may give rise to engorgements of the lymphatic system of one region of the body, as well as of another; and that it would be absurd to conclude, that a bubo is necessarily syphilitic, because it appeared soon after a coition.

SECTION IV.

One reputed primary symptom remains to be examined: the mucous pustule, (pustule muqueuse, pustule plate, humide, tubercule muqueux papule muqueuse).

At whatever period we have examined it, or whatever may have been the antecedents of the mucous pustule, it never produced anything by inoculation. The morbid secretion which it produces, has been inoculated with a lancet, applied to vesicated or rubbed upon denuded surfaces, retained on points of the skin from which the hairs had been plucked out, but all without any result; and yet the contagion of mucous pustule seems to be proved, and in some individuals it seems to be the first symptom with which syphilis makes its appearance. But contagious, by an intangible vital process, which cannot be explained, the mucous tubercle cannot be transmitted by means of inoculation.

This curious symptom, so obscure in its commencement, and so insidious in its progress, forms the connecting link between the regular and characteristic point of commencement of syphilis, chancre, and the symptoms of general infection. Apparently similar to chancre in being thought like it, contagious, and perhaps the beginning of syphilis, it differs from it in the results of inoculation. Resembling the secondary symptoms inasmuch as like them it succeeds to chancre, and can propagate itself by way of inheritance, and furnishes nothing by inoculation.

However, the mucous tubercle, which some authors have wished to divide into two species, the primary and the secondary, and which is

evidently the same in its nature and source in all cases, only differing in its antecedents, which are often very difficult to determine, is also one of those symptoms which, although very characteristic of syphilis, have not been well examined.

If examined with regard to its causes, seat, form, progress, concomitant symptoms, and consequences, it possesses so much interest, that we may be excused if we pause a moment to consider it.

It may be confidently asserted, that the regular and constant antecedent and specific cause of the mucous tubercle, is chancre. In an individual, actually affected with mucous tubercles, we find either that they have been preceded in himself by chancre, or that he has contracted them from an individual who has had chancres; in short, we find, if we do not rest satisfied with a superficial examination, that there has been, either in one individual or other of those who have apparently transmitted the mucous tubercle, a chancre as the starting point. But an incontestible fact in the history of the causes which preside over the development of mucous tubercles is, that all individuals are not susceptible of them; if they can be situated on the mucous membranes, yet all parts of the skin are not equally susceptible, and must naturally or by a morbid process be related to the nature of the former, in order to become affected by it. Thus persons of a lymphatic habit, women, and children, are most subject to it; the mucous membranes of the genitals, anus, and mouth, are most frequently attacked; and the skin is seldom affected by it, except around the sexual organs, anus, or umbilicus, in the meatus auditorius externus, behind the ears, &c.

In its material form, or in the lesion of the tissue which constitutes it, the mucous tubercle, especially when isolated, is very often difficult to distinguish from chancre during the period of unhealthy granulation, (reparation vicieuse,) in most cases the remains of the abrupt edges of chancres distinguish them from the less defined base and circumference of the mucous tubercle; but in chancres, which have remained superficial, and which quickly pass the state of granulation, or into one of the varieties of *ulcus elevatum*, the distinction is no longer possible.

It is very evident, that the mucous tubercle is far more common, as secondary symptom, than as reputed primary. If, on the other hand, it be considered that in the latter case it is far more frequent in women and children, where the chancres to which they owe their origin may have remained unperceived or concealed; that the time at which the patient complains of, and we are called to observe them, is more or less remote from the time of infection, and at the time when true secondary symptoms may already have developed themselves, it will be easy to admit that a chancre has preceded it; the more so, if a patient only presents one or two mucous tubercles upon the parts generally subjected to contagion, without other antecedents than connection with an infected individual. To accurate observers, it must be clear that these are only chancres in an unhealthy state of granula-

tion or transformation *in situ*. We also often find, in the midst of a knot of mucous tubercles, an untransformed chancre, which affords an inoculable pus. In other cases, the tubercles are in great number, often upon different parts of the body at once, or accompanied with other symptoms, which leave no further doubt as to their characteristic and specific form, and their nature as symptomatic of constitutional syphilis.

We must not, in this place, forget, that of all the secondary symptoms the mucous tubercle can appear the soonest; and, as before said, not only at a distance from the point of infection, but also on the same spot as the primary ulcer, and by an insensible change, *in situ*, from inoculable chancre to tubercle not possessing this property.

We must now examine whether the mucous tubercle can succeed to a gonorrhœa. The following are the results I obtained.

A gonorrhœa, properly so called, i. e. a muco-purulent discharge, uncomplicated with chancre and therefore not inoculable, was never followed by mucous tubercles, or either there existed at the same time a concealed chancre, (*chancre larvé*), or it was only one of those discharges which are concomitant or consecutive to mucous tubercles, and which superficial observers might then regard as the primary cause of them. I confess I was long before I discovered this fact, that, where the mucous tubercles develop themselves, they not only generally furnish a peculiar morbid secretion, but also cause a cattarrhal flux of the mucous tissues on or near which they are seated. From the foregoing, I have drawn the following conclusions—

I. That the mucous tubercle never inoculates;

II. That it ought to be placed with the secondary symptoms, and is a proof of constitutional syphilis;

III. That the secretion which it may produce, acting like irritating matter, causes inflammation of the tissues with which it comes in contact;

IV. That when syphilis has been transmitted to an individual from mucous pustules, there must have been other specifically contagious symptoms at the time of the infection;

V. That like the other secondary symptoms, the true mucous pustule can only be transmitted by inheritance.

CHAPTER III.

INOCULATION DISTINGUISHES PRIMARY FROM SECONDARY SYMPTOMS.*

The celebrated Hunter had already established, by accurate and

* My clinical observations have led me to the following classification of the symptoms of syphilis.

I. Primary symptom, (*accident primitif*), chancre from the direct action of the virus

learned experiments, the fact, since confirmed by a great number of other experiments, that the symptoms of constitutional syphilis cannot be inoculated.

Notwithstanding the authority of such a master, and adhering to the principle I had adopted of raising rational and philosophical doubts upon every point, I have examined one by one all the reputedly secondary symptoms of syphilis, and the results have been in conformity with the facts established by Hunter.

But from this great and acknowledged difference between the primary affection, chancre, and its secondary symptoms, can it be concluded, as M. Richond and the fosterers of the doctrine he supports have done, that the principle of syphilis cannot be identic and peculiar; since when it produced its most decided and characteristic effects, it then ceased to possess its most energetic qualities, the possibility of inoculating?

My researches having made me better acquainted with the primary symptom of syphilis, its true commencement, I arrived at this conclusion, which has been established by most good observers, that all the reputed secondary symptoms are far from being specific. That the

which it produces, and by means of which it propagates itself by contagion from a diseased to a healthy individual, either by inoculation in the same manner, or in the individual himself from one point to another, without being transmitted by inheritance with its principal character—the possibility of inoculating; but capable of producing the primary infection of the infant, at the moment of its birth or afterwards.

II. Successive symptoms, (*accidents successifs*;) or those which arise from contiguity of tissue, or by simple extension of the first local symptom, as new chancres; simply inflammatory, or virulent abscesses, or adenitis, &c.

III. Secondary symptoms, or symptoms of general infection, in which the virus has undergone a modification and produced the *syphilitic temperament*; symptoms developing themselves upon the skin, the mucus membranes, the eyes, testicles, &c. and seldom happening before the two first weeks of the duration of the primary affection, chancre; but generally after the fourth, sixth, eighth, or even much later; never being capable of inoculating, if we are well able to recognize them, and if we do not allow ourselves to be deceived by the patients. These secondary phenomena can be transmitted by way of inheritance, and that in a most incontestable manner, from mother to child, which then presents after its birth general symptoms corresponding to those of the mother, without previous primary affection, and without their being attributable to the previous or subsequent action of the sympathies upon them, by the sexual organs of the father or mother, two or three months after birth.

IV. Tertiary symptoms, (*accidents tertiaires*;) occurring at indefinite periods, but generally long after the cessation of the primary affection; only showing itself in most subjects, after secondary symptoms have occurred, and still exist or have disappeared, which ought not to be neglected for the diagnosis; symptoms which not only no longer inoculate, but which are no longer capable of propagation by inheritance, with the specific characters of syphilis, like the secondary, and are perhaps a frequent cause, by generation, or the production of scrofula, which often is but degenerated syphilis. Under the head of tertiary affections, we must place nodes, deep seated tubercles, tubercles of the cellular tissue, periostoses, exostoses, caries, necrosis, syphilitic tubercles of the brain, which I have described and shown to the Académie de Médecine; internal affections which have been hitherto ill defined, (Sanchez,) &c.

V. Lastly, other diseases, unconnected with syphilis, which however may have favored their development, such as cancer, phthisis, scrofula in the individual primarily affected, which must be distinguished from the transmitted scrofula, which we mentioned above, scurvy, various acute or chronic inflammations, which possess no specific quality, and which, from the apparent antecedent, might be attributed to syphilis, and would thus become the source of serious errors and obstacles in the treatment.

infection by the venereal virus may produce in the system disturbances, lesions, and the development of morbid symptoms, resembling those which another non-specific cause might have equally produced, but which independently of these symptoms may be the most common, and which afford a fallacious support to the doctrine of the non-specific nature of syphilis, or the non-existence of the virus: there are some, regular and characteristic, occurring as necessary and invariable consequence of the primary infection, and which are the result of chancre, under one of the forms we have above assigned to it, or the product of inheritance, which only military surgeons can deny, for want of a proper field for observation.

In following the pus of the chancre in its penetration into the system, if I may so express myself, we have seen that as long as it was only imbibed by the cellular tissue, at whatever depth it might arrive, it preserved its characteristic property, the possibility of inoculating.

The same was the case with the *vasæ lymphaticæ afferentes*, which run from a chancre to the first ganglion, in which they terminate, and that beyond this point, where the mixture with the circulation and other organic materials by this kind of ganglionic digestion, which takes place in the lymphatic system, begins, the virulent pus underwent a transformation which without depriving it of its specific nature, with regard to the symptoms it produces in the system, destroyed the possibility of its inoculating. That it was only by this modification that the *syphilitic temperament* could establish itself, so as to give rise at a future period to the diathesis, by the development of secondary symptoms; that, without passing through the lymphatic system, this result was the consequence of venous absorption: it not being requisite for the development of the symptoms of constitutional syphilis that the virus should pass through the lymphatics, or that the production of buboes should precede it.

But if absorption of the venereal virus does undoubtedly take place in two ways, first, by the lymphatics without alteration in the primary qualities till it arrives at the first ganglion; secondly, by the veins thus directly infecting the system and so easily producing cutaneous affections, as we observe in all cases in which deleterious substances are injected into these vessels; it is very remarkable, that we have never found inoculable pus in the veins, however near or remote from the chancre;* once united with the blood, the virulent pus no longer inoculates.

* M. Jourdan says, in his treatise on venereal diseases, vol 1, p. 499, (*Traite des maladies vénériennes*: "The blood of an individual affected with syphilis is not more infected than it is in variola, according to Darwin; or in hydrophobia, according to M. M. Trolhier et Berthold.

"The blood of a syphilitic patient, says Hunter, is not contagious. It may be inoculated without fear of the disease; for if it were capable of irritating a simple wound and producing in it a venereal inflammation, every individual in whom this matter circulates, or who is attacked with syphilis, must necessarily have a venereal ulcer wherever he might wound himself, or even scratch himself with a pin, the part thus ulcerated, would become a chancre." Bell thinks that this happens sometimes, but he particularly insists that it is in the very advanced period of the disease. I think Bell did not well observe the circumstances in which this happened.

We must be careful not to be imposed upon by what frequently occurs in men affected with chancres on the glans, or prepuce; I mean, those engorgements like a cord stretched along the dorsum penis, and which is commonly called dorsal phlebitis of the penis. I have frequently had an opportunity of observing this symptom, and of proving that it was owing to an inflammation of the lymphatics and not of the veins; observing that this kind of cord, which is frequently knotty, runs from the chancre to the ganglionic regions, without ever passing them, and that it does not present the uncertain course as regards its limit, extending itself towards the centres of the circulation, which the venous inflammations so unfortunately do, we are led to acknowledge that the lymphatics alone can present these conditions; but if, as I have done, the diseased parts be dissected, pathological anatomy leaves no further doubt. When they suppurate, which is not very rare, and the abscesses open or are opened, we find pus not mixed with the blood, as is the case, either in clots or otherwise, in phlebitis.

If, however, all good observers are agreed, as to the impossibility of inoculating with the lancet the pus or morbid matter produced by the secondary affections, as well as the different normal or abnormal secretions of individuals reputedly affected with constitutional syphilis, some men may have been misled by symptoms which, from their seat and the time at which they were developed, might, upon a superficial examination, be attributed to general affection; thus I have found primary ulcers of the lips, tongue, and even of the pharynx, which had been contracted directly and by illicit means, and which necessarily furnished an inoculable pus; symptoms, whose true cause, or the manner in which they were infected, the patients sought to conceal: this is perhaps still more the case with diseases of the anus. In individuals affected with the itch or prurigo, during the existence of a chancre, and who in scratching themselves inoculate themselves on different points of the skin, and cause, in the midst of the other eruption, the production of the primary pustule of chancre, one might believe in the existence of secondary syphilitic ecthyma or rupia, which would present in this circumstance, if ill appreciated, the apparently contradictory fact of the possibility of the inoculation of general symptoms.

From the facts relative to inoculation of the secondary symptoms, we must conclude.

I. That it does not follow that because a symptom does not inoculate, it is not syphilitic, whilst the virus, modified by venous absorption and susceptible of poisoning the system, loses this quality, and retains that of propagation by inheritance alone.

II. That whenever a symptom, whatever may be its seat and apparent form still inoculates, it is necessarily the produce of a direct contagion, and not the result of a general infection, owing to absorption from another point, and does not indicate the actual venereal temperament, or in received terms, constitutional syphilis.

CHAPTER IV.

INOCULATION SERVICEABLE IN THE THERAPIA.

SECTION I.

DISHONESTY and the speculation of quacks, which continually make the most sacred science subservient to their purposes, have availed themselves of the inoculation of syphilis, like every other means of success and celebrity; but if there be men who are reckless of consequences, there are some too whose actions are guided by the interest of science alone, and whom no imputation can affect.

Thus inoculation has been employed in the study of the prophylaxy of syphilis; in this study, which cannot be too much encouraged, and which we do not doubt will one day arrive at the discovery of an absolute neutralizing substance, for the specific principle of syphilis; but in this case it is apparent, inoculation neither has been, nor can be employed, like that of vaccine to prevent variola, and it has been only used to prove the efficacy of any preservative.

With this intention, Luna Calderon* made his experiments, which, though they were so ill received at a time when the search for a preservative against diseases sent by Heaven to punish libertinism, was perhaps still regarded as a sacrilege, the facts which he has furnished, which are favorable to inoculation, and the demonstration of the results of prophylaxy, ought to be mentioned in this place. A commission, appointed by the Société du cercle médical, and composed of M. M. Capuron, de Mangeon, Gardien, and d'Olivera, assembled in the venereal hospital of the capital for this purpose.

“ *First Experiment, with previous resolution to permit the infection.*

“ November the 7th, 1812. The assistant surgeon selected, in the public receiving rooms, a well characterized venereal chancre, and dipt a lancet in it. I scratched myself with this instrument on the external part of the right side of the prepuce, without making it bleed. Five days after I went to the hospital, accompanied by the members of the commission, and made them observe a slight ulcer upon the scratched part, and a discharge of pus between the prepuce and glans, (gonorrhée externe); the glands in the left groin were a little swollen. The surgeon-in-chief declared he would determine if the infection was truly venereal, and that we must wait some days before curing me. I consented to it, and waited till the ninth day; I then presented myself again: the ulcer was become a well defined chancre. There were also three other little chancres surrounding it. All present declared the

* *Démonstration pratique de la prophylaxie syphilitique, par le docteur Luna Calderon publié à Paris, en 1815.*

venereal infection perfectly characterized. I then undertook to cure myself, and in thirty days, nothing more remained.

"The object having been fully attained, the experiment was certified by the commissioners, and entered in the register of the hospital.

"Second Experiment, with the previous determination of protecting myself.

"December 18th, I again scratched my prepuce with a lancet, dipt in a venereal chancre, chosen with the same precision and the same circumstances as in the first experiment. Immediately after, I applied the preservative to it. At the end of five days, I went to the hospital to have the result certified; neither an ulcer nor lesion of any kind was to be seen upon the prepuce.

"The object of preserving myself was attained. The experiment was certified, &c.

"Third Experiment, with previous determination to protect myself.

"December 30th, I made a similar trial, and presented myself, January 9th, 1813; the prepuce was well and showed no mark of infection.

"Fourth Experiment, with previous determination to protect myself.

"On the 9th of January, after having had the former result certified, I scratched another place on the prepuce, under similar circumstances, and applied my preservative to it. Eight days after, I again presented myself without having perceived the least sign of ulceration on the prepuce.

"Fifth Experiment, with a bloody incision.

"Having gone before the commissioners, on the 17th of January, I prepared to make an incision instead of a scratch; but at the instant of making this incision, I foresaw that the wound might afford too slight a suppuration for the experiment to appear decisive; I then determined to annul this trial and to vary it in the following manner, so as to obtain a decided result.

"Sixth Experiment, with a double incision: the one simple, without contagion, the other contagious.

"My aim in this experiment was to show the contagious incision, cicatrized in the same time as the non-contagious incision, by preventing the development of the infection in the inoculated point, by means of my preservative. The 10th of February following, I made two incisions: one contagious, on the left side of the prepuce, with a lancet dipt in the virus; the other non-contagious, on the right side, with a clean lancet. I also scraped the part between the two incisions till it bled, with a lancet dipt in the virus; I applied my preservative to the two inoculated points.

"I presented myself at the hospital on the 17th of the same month; the two points that had been inoculated, and that which had not, were all three equally cicatrized.

“ This double and threefold experiment has proved, that by means of the preservative the contagion did not develop itself in the inoculated points; for the contagious incision, and the part scraped till it bled, would not have cicatrized in the same time as the simple incision, if the infection had developed itself; thus the object was attained.

“ *Seventh Experiment, of a double contagious inoculation, in two different points, with the design of protecting the one by means of the preservative application, and permitting the developement of the disease in the other, by not applying the preservative.*

“ February 17th, I scraped the left side of my prepuce till it bled, with a lancet dipt in the virus, and I made in the same manner, a contagious incision on the right side; I applied the preservative to the scraped part and not to the incision. On the third day, the scraped spot showed no lesion, and the incision presented a characteristic venereal ulcer.

“ *Eighth Experiment, with the determination of preserving myself.*

“ March the 24th, I took a lancet that had been dipt in the virus, and scraped the left side of the prepuce, in the same manner as before. Five days later, I presented myself without the least mark of disease on the scraped point.

“ *Ninth experiment, two points scraped, with previous determination to protect the one and not the other.*

“ On the 12th of May, I scraped each side of my prepuce, in the same manner as before. I then applied my preservative to the right and not to the left side; but stated beforehand, that if the preservative spread by chance from one side to the other, the two points would be equally preserved, and consequently the infection on the left side could not be obtained. Seven days after, I presented myself at the hospital, without the least mark of disease. My conjecture being realized, the experiment was certified, &c.

“ *Tenth Experiment, contagious incision, with determination to preserve myself.*

“ March* the 19th, I made an incision on the left side of my prepuce, in the same manner as before. On the 26th, I presented myself, without the least sign of disease.

“ *Eleventh Experiment, double incision, both contagious on each side of the prepuce, with a previous determination of preserving one side and permitting the infection on the other.*

“ June the 3d, I made three slight and contagious incisions, very near each other, on the right side of the prepuce, and three, also contagious, on the left. I applied the preservative on the right and not on the left side; and to avoid the inconvenience which had prevented our aim being attained in the ninth experiment, I placed some lint between the sides, to prevent the preservative spreading from one side to the other. On the third day, the wounds, where I had applied the preservative, were cicatrized; but the wounds on the left, presented a well marked

chancre; a bubo also appeared in the left groin. I was cured of all in less than twenty days.

"The object of this experiment was accomplished, as well as that of all the others.

"During the intervals between each sitting, I presented myself at the houses of each of the commissioners.

"More than a year has elapsed since these experiments terminated; I have still the cicatrices on the left arm, remaining from other experiments made many years since. No one ever knew me in better health, than I now enjoy."

LUNA.

To the researches and experiments of Luna Calderon, to whom the just reproach is made of having kept his preservative secret, and which in all probability in some kind of caustic soap, may be added the experiments made with different agents, such as the product of normal and morbid secretions, chemical and medicinal substances.

The pus of chancres mixed with—

urine,
vaginal mucus,
muco-pus of gonorrhœa,
 belanitis,
 vaginitis,
saliva,
fecal matter,
perspiration,
semen.

In all these mixtures, the virulent pus of chancre underwent no modification, which could change its nature or decompose it; but it must be observed, that to secure its action, the pus must not be too much diluted, for if mixed in too small a quantity, it cannot communicate its contagious property to all the liquid which serves as a vehicle for it.

Whenever I have inoculated the virulent pus of a chancre, mixed with a caustic alkali, or a weak acid, the results of the inoculation have been negative, the chemical substances decomposing it, not that they have peculiar specific virtues, as some have thought, but by their property of destroying matter or organic products without distinction; thus sulphuric, nitric, hydrochloric, and acetic acid, and the pure chlorides, mixed with virulent pus, have constantly prevented it from acting by inoculation; and whilst the pure pus inoculated in the same subject produced a pustule, the pus altered by one of the above-named substances always remained without effect, when placed side by side with the former and in the same condition, except the neutralizing agent; the same was the case with the caustic alkalies, potass, soda, volatile alkali, wine and alcohol; a concentrated decoction of oak bark, produced the same results.

But if these substances, from the consequences they produced after inoculation, have been considered as prophylactics, it must be under-

stood that the results only followed when the mixture was made before or at the instant of the inoculation; for as soon as the virulent virus has been implanted in the tissues, if we may be allowed the expression, and these infected, even in the first days, unless the parts be destroyed by a real cauterization to a greater depth than those which have been contaminated, the neutralization does not take place, and the chancre is developed. From very exact experiments with inoculation, we find that the efficacy of any of the above-mentioned prophylactics cannot be depended upon for destroying the virulent pus, which has even only just been put upon an entire surface, or momentarily to destroy a virulent secretion of an individual who could otherwise communicate disease.

As to mercurials, a proof of whose specific action some persons have thought to find in advancing, that mixed with virulent pus they destroyed its contagious property,* they only act in two ways, either as caustics or *coagulants*, as corrosive sublimate does, either in powder or in solution, and this is here only a chemical action; or being mixed with fatty substances, which then only oppose themselves mechanically to the application of the virus, and even this does not always take place.

A fact, perhaps not without some interest, ought not to be passed over unnoticed.

M. Malapart, in his *Théorie du traitement du bubon par le vésicatoire et la solution de sublimé corrosif*, says, "that the mercurial preparation used as a caustic, had also another beneficial action, in neutralising the virus on the spot, and thus transforming a virulent into a simple or benignant bubo."

We have found, however, that buboes which were treated in this manner, and according to the indications the author has himself given, and which were arrived at suppuration, have furnished an inoculable virulent pus, like that of the chancre which preceded them, and similar to the pus of virulent buboes, which were not treated in this manner; mixed with fatty substances, the virulent pus undergoes no change and remains inoculable.

Inoculation cannot be of great service employed with the view of ascertaining the curative or anti-syphilitic effects of therapeutical agents. We might certainly, if we wished, determine, during a general or local medication, the moment when a primary ulcer ceases to furnish a contagious pus, and tends towards healing; but the transition from the ulcerative period, to that of reparation or cicatrization, could not, in all cases, be the proof of the neutralization of the virus by the effect

* Petit Madel, in his *Traité des maladies syphilitiques*, says, p. 17: "The syphilitic deleterious principle, so well known by its effect on our system, is far from being so well understood in its nature. Ever united with a mucous or purulent matter, which serves it as matter, all experiments which may be made upon it, are ineffectual. However little experiments on it can effect, they have nevertheless served to establish; viz. that the deleterious principle, if triturated with an oxide of mercury, or any mercurial salt, loses its infecting property, although it preserves it, after a long contact with the most energetic caustics." This assertion is absolutely false.

of the medicament actually employed, as this result may, in some cases, be spontaneous.

SECTION II.

Inoculation has however been seriously employed as a therapeutical agent, with the view of modifying an obstinate or reputed incurable affection of old standing.

I may here be permitted to quote the observations of Percy, who seems to have been the first who attempted syphilitic inoculation, as a therapeutical agent; but who is not, as Deguerre thinks, the first that tried the inoculation with another view.*

The following is what has been quoted from Percy by Petit Radel, Deguerre, and others.

"A drummer of the regiment de Rouergue had in vain tried all remedies at Landau and Besangon for a syphilitic complaint, whose symptoms were a bubo in the right groin, a deep chancre of the glans, near the frenum, pains in all his limbs, and a sort of universal icterus. The desire of being cured rendered this man very docile and exact, during the two treatments, one of which was without success, and the other only with that of cicatrizing the chancre, without affecting the jaundice or bubo, for which the patient used mercurial pills and emollient plasters, till his patience was worn out; he contracted a second syphilitic affection, which a fortnight after the infection declared itself by a multitude of warts on the penis, a chancre on the prepuce, and the renewal of the old one; the inflammatory increase of his bubo and augmentation of the pains, which still remained in all his limbs; the jaundice alone appeared not to feel the effects of it. In this state, he returned to the hospital at St. Louis, at Besangon, where received twenty frictions, which dispersed his former and latter symptoms at the same time, and restored him his health, which he has ever since maintained.

"In 1777, an employé aux fermes du roi, underwent a treatment for a chancre of the velum palatinum, two others on the penis, and a number of excrescences at the anus. After a careful preparation, he received eighteen frictions of two drachms each; he was salivated at the fifth; but the salivation having suspended the frictions but a short time, the above number was completed in about six weeks. He discontinued the treatment without having reaped any other benefit than the cicatrization of the two chancres of the penis; that of the throat still existed, and the excrescences, which had been cut and cauterized, were not long in springing up again; besides this, he had a kind of aphonia, accompanied with a continual buzzing in the ears. One of his relations placed him under the hands of an old surgeon-major of artillery, who made him undergo a new treatment, which was as ineffectual as the first. This surgeon cut away the excrescences, which

* Deguerre *Essais sur l'inoculation du virus syphilitique. Paris, 1804.*

soon returned again; the throat remained the same ; the buzzing in the ears and loss of voice persisted. Thus he did not cure this patient, even after six months treatment. Then ennui and the solicitations of his friends having again brought him amongst debauched women, he evidently got a new infection, which, in less than eight days reopened the old chances, produced a third, as well as a bubo in the right groin, and ulcerated the anus in almost its whole extent. The cure of this fresh disease was confided to M. Percy, sen. After having properly prepared the patient, he gave him sixteen frictions ; there was no appearance of salivation; the bubo dispersed itself; the excrescences fell off of themselves : the patient regained his health, which has hitherto remained good.

“ M. Percy returning home to spend the winter of 1778, found at his house a soldier of the artillery of Grenoble, who, having formerly been his servant, was come there with the consent of M. Percy, sen. to be cured of a disease which he said he had taken in Strasburg. This disease consisted in a dreadful syphilitic affection; the symptoms of which were a chancre, which had destroyed the left tonsil; another chancre occupied two thirds of the corona glandis, a cutaneous affection of the perinæum, scrotum, and upper part of the left thigh, a lead-colored tint and violet pimples upon the forehead. He had already twice undergone a course of medicines and taken an immense number of drugs for his complaint. After some preliminary preparation, and having in vain tried the *tisane de Felz*, M. Percy inoculated the venereal virus upon this patient, in the presence of many medical men; after having diluted the chancre pus with a little saliva upon a glass plate he loaded with it the point of a lancet, which he carried horizontally on the part of the right arm at the insertion of the deltoid muscle; he there made, between the epidermis and corpus reticulare, a puncture without blood being drawn; then, having recharged the same instrument, he made a second, and then a third: he made an equal number on the left arm in the same part and in like manner; he applied no bandage to these punctures; the patient was put upon vegetable diet and ordered copious draughts of sudorific tisane. Five days passed without anything particular appearing; on the sixth, about noon, the patient felt a sharp pain in the left arm; at two o'clock, he felt the same in the right arm; the puncture became gaping; in the evening, a red zone surrounded each arm; the patient had then some slight horripilations; during the night, he had headache, and an alternation of heat and cold. The next day, the seventh day from the inoculation, the punctures were inflamed and painful, the arms swollen in almost their whole extent, some axillary glands swelled; the throat was burning, the patient feverish all the day, and in the evening about nine o'clock he complained that his cutaneous affection caused him much pain. The eighth day from the inoculation, the throat was in the same state as the preceding day; the puncture formed but one suppurating wound; the cutaneous affection and the chancres had increased but little. The ninth and tenth, things seemed to be in the same state;

the eleventh, the left groin swelled, several glands presented signs resembling a bubo; but there was not one. The fourteenth, the wound on the right arm was perfectly cicatrized, that on the left had become enlarged; the throat was better; the pains caused by the cutaneous affection and chancre had subsided. On the eighteenth, there scarcely appeared anything; the patient was brought back to his former state, except that the chancres of the tonsil and the corona glandis were more extended; and a deep ulcer remained on his left arm. At this period, M. Percy being obliged to rejoin his regiment, he left the care of the treatment to his father, who began the preparations a month and half after the inoculation: he gave him sixteen frictions. This treatment had all the success that could have been desired."

If it be true, that M. Percy had reason to be satisfied with the experiments he had made, and if we sometimes see patients, under treatment for some recent affection recover from symptoms of older standing, which had till then resisted, these results are not sufficiently regular and certain to authorize a similar practice. Nothing can be more proper than to take advantage of a new disease, which the patient has himself contracted, to free him from another which he had before; but to advise him to submit to a new infection, whose primary chances cannot be exactly foreseen, cannot, at least in the present state of science, be regarded as a rational method.

Inoculation of a new gonorrhœa had been advised, and is still perpetrated by many practitioners, either to cure a chronic discharge, or to combat by revulsion, symptoms which gonorrhœa may produce, such as epididymitis, ophthalmia, arthritis, &c.

Some in this case are content with advising a new infecting coition; others make a kind of inoculation with the muco pus of gonorrhœa, carried on a probe into the urethra, or applied to the mucous membrane it is wished to infect, by means of a bit of lint, which is impregnated with it. The matter of gonorrhœa can never be inoculated with a lancet, like chancre, either, as we have said, so as to produce an ulcer, or even cause a discharge; so that if it be certain that the muco-pus of gonorrhœa is contagious, and may be considered as the most effectual agent of a disease similar to that which produces it, most frequently the result obtained is owing to the mechanical action alone of the instruments employed, as Broomfield and the late Cullerier insisted.

However, were I not convinced that the cases in which it is useful to recall an old discharge, or develop a new one, are as rare as some persons think them frequent, and that they have either aggravated the disease they wished to combat, or given it a new complication, I would not apply the muco-pus of a gonorrhœa of one individual to another, before having ascertained upon the one from whom it is to be taken, that it produces nothing when inoculated with the lancet; otherwise, without this precaution, a patient, with *gonorrhœal symptoms*, might, being affected with concealed chancres, (*chancres larvés*,) communicate to an individual, who till then had only had a simple catarrhal af-

fection, without further consequences, all the formidable chances of syphilis.

SECTION III.

Not only has inoculation been tried in the cure of venereal and syphilitic diseases themselves, either as a prophylactic, or in the curative treatment during the stage of either primary or secondary symptoms, but has been by some applied to the treatment of diseases, quite distinct from syphilis, and which often, incurable when uncomplicated, seemed, being combined with syphilis, to yield to a treatment reputed to be specific for the latter.

Indeed, what practitioner, in a mass of cases of obscure ætiology and insidious progress and refractory to the ordinary therapeutical agents, has not diligently sought in these cases to find some syphilitic element, and thus obtain a pretext for a specific medication, which is so frequently crowned with success? But if these cases are so frequent and of daily occurrence, are there not some circumstances in which diseases, quite independent of syphilis, and which had yielded to no treatment, have yet, after a syphilitic infection, undergone a modification, by which they became accessible to the anti-syphilitics, and have been cured and disappeared with the venereal symptoms which had supervened? I have frequently shown to my clinic, severe cutaneous affections of an old standing, and till then incurable, which have had, under these circumstances, these happy results.

After similar observations, Dr. Martini, of Vienna, had commenced some very interesting researches on this head, when a serious illness interrupted his labors.

If the medical use of the venereal virus might, like so many other poisons from which benefit is derived, be allowed in therapeutics, it could only be with extreme caution, and after accurate observations; for it must not be forgotten, that the consequences of a syphilitic affection cannot be foreseen, and that generally syphilis is serious, in proportion to the antecedent or concomitant disease with which the patient, who contracts it, may have been affected.

SECTION IV.

But can the artificial inoculation of venereal diseases be of service in determining the choice of the method of treatment?

If it were proved, that every syphilitic affection, inoculable chancre, or truly primary syphilis, were only to be cured by mercury, and that it was hurtful in contrary cases, as Hunter and his followers have thought; or if every inoculable chancre were followed by secondary syphilis, and mercury or any other medicine possessed prophylactic properties against general infection, inoculation would be of great service. But, as observation shows every day, the primary symptoms often heal of themselves, with proper attention to cleanliness, or with

different kinds of local applications, without all being supposed to possess specific virtues.

It is however proved, that all primary symptoms, (chancres,) capable of being inoculated, do not produce general infection; and that in the circumstances in which secondary symptoms would show themselves, the mercurial treatment, for instance, employed during the existence of primary symptoms, is so far from preventing them in all cases, and in an invariable manner, that some superficial observers of the physiological school have not hesitated to declare, that the pretended secondary symptoms of syphilis were only the result of the employment of mercurials, although continued or employed after their use having been suspended, they still remained the best curative treatment of the symptoms, of which they were accused of being the cause; that in the cases in which they had not prevented their development, we can easily admit that they were not properly employed; and that the greater number of characteristic secondary symptoms of syphilis, showed themselves, under favorable circumstances, far more frequently in patients whose primary symptoms have not been treated with mercury.

To sum up, for those who remain convinced that there can be no radical cure of syphilis, unless the primary symptoms have been treated with mercury; and those who, on the other hand, without entering into all the exaggerations of the antagonists of mercury, yet are convinced that this medicament ought not to be uselessly employed, inoculation is incontestibly the only unexceptionable touchstone, whenever it may not be too late to employ it. That if one day the definite value of mercury should be better understood, or if an absolute specific for syphilis should be discovered, its value must be proved, or its employment indicated, by inoculation.

If, at the present time, inoculation does not serve to fix the indications for the treatment, for those persons who are yet uncertain in their therapeutics, it is of great value as regards the prognosis of the future chances of the patient, for *every individual who has had inoculable symptoms remains positively susceptible of general infection, and liable afterwards to symptoms of constitutional syphilis.*

CHAPTER V.

INOCULATION MAY BE APPLIED TO SANATORY REGULATIONS AND FORENSIC MEDICINE.

WHEN Celsus treats of the diseases of the sexual organs, before entering upon the subject, he thinks it necessary to excuse himself for the indecency of his subject, as if a reproach could be made to a medical man occupied in soothing suffering humanity! As well might

it have been said to Mascagni, that there were indecent things in anatomy. When treating of inoculation, in a sanatory point of view, I ought not to fear that I should, in my turn, be accused of immorality.

It must be evident to whoever sees men as they are, in the cabinet of the practitioner, and without that disguise of morality, which society requires, that there are circumstances in which sexual intercourse becomes indispensable, under pain of the most serious moral and social consequences in case of denial. Undoubtedly whenever a patient consults us, having suspicious symptoms, contracted in circumstances in which syphilitic symptoms are generally contracted, he must abstain and far from (as the authors of the Dictionary, in 15 volumes, have published) giving clean bills of health to our patients, upon ill-founded convictions, we should take care not to affirm that such and such symptoms, which has been found contagious, is quite innocent, as they have done for bubo; but we deliver this clean bill of health, in *serious and urgent circumstances*, to every individual with an ulceration which shall furnish a pus not capable of being inoculated, and who is not actually under the influence of an abundant secretion, which can, as a cause of irritation, produce an inflammation of the healthy tissues, with which it may come in contact.

Now, if we pass to the cases in forensic medicine, which have reference to the venereal diseases, we shall be startled at the difficulty of the questions, which too often present themselves, and the careless manner in which they have been decided by professional men.

In questions of rape, for instance, the consequence of syphilitic infection are often brought forward as a proof. Well! what practitioner would not, in the present state of science, seeing a man affected with gonorrhœa, accused of having violated a woman actually infected with chancre, have regarded this pretended coincidence, as a proof of great value? But when it is incontestibly shown, that chancre alone can produce chancre, if the gonorrhœal muco-pus of the individual, who is supposed to be guilty, produces nothing upon inoculation, after having been properly tried, will it not be evident, in a case of recent infection, that he cannot be convicted? And again, would it not be proved, by the same way of experimentation, that individuals accused of having communicated syphilis, which must aggravate the position of all persons thus accused, have only caused by mechanical violence, or by the action of some morbid or normal secretion, simple inflammations? Should we not then, by the certainty of the diagnosis, frequently be able to remove grievous imputations, or discover the truly guilty, under circumstances in which, without this means, the conscientious man would have remained in doubt, which, although unjustly, is not expected in a man of science?

Such results, whose whole force cannot yet be seen, would alone suffice to justify the numerous researches I have made, had they not already served greatly to elucidate questions which had hitherto remained insoluble, and to overthrow a host of prejudices, sanctioned by time and powerful authorities.

PART THE SECOND.

CLINICAL AND EXPERIMENTAL RESEARCHES.

CHAPTER I.

PARTICULAR OBSERVATIONS.

SECTION I.

INOCULATION OF THE PUS OF CHANCRE, SIMPLE AND COMPLICATED, ITS VARIOUS FORMS AND PERIODS.

CASE I. *Regular chancre, with symptomatic bubo, and suppurated lymphatic, inoculation producing the characteristic pustule in every case.*

Maison —, aged 31, entered, August 2, 1836. The date of the appearance of the chancre on the edge of the prepuce could not be accurately determined; but twenty days previous, a bubo had shown itself on the right side, and at the same time the course of a lymphatic vessel on the dorsum penis, running towards the anus, was marked by redness and a hardened point about the middle of the dorsal surface of the organ. Ten days since, having uncovered the glans, the patient not being able to replace the prepuce, a paraphimossi was the result.

We found the chancre of the frenum still in the period of increase, as well as that on the edge of the prepuce, which had extended itself, inoculating the division of the skin, caused by pressure of the band of the paraphimosis; the reversed mucous membrane of the prepuce, formed a hard collar, upon which were some ulcerated points. The little lymphatic tumor had suppurated and opened spontaneously the previous day; the bubo was in full suppuration at the summit.

August 3rd. The pus taken from the collar of the paraphimosis, was inoculated with a single puncture on the right thigh. The ulceration having destroyed the band of the paraphimosis, some lint merely was applied, dipt in aromatic wine;* the same dressing was used for the chancre of the frenum, and cauterization with argent. nitr.

The 6th. The inoculation of the 3rd had produced the characteristic pustule.

The 8th. The pustule was cauterized; and the pus of the ulcer resulting from the spontaneous opening of the lymphitis on the dorsum penis was inoculated; the bubo was opened and furnished much pus.

The 9th. The pus of the bubo was inoculated on the left thigh.

* See Formulary.

The 12th. The inoculations made on the 8th and 9th had succeeded and produced a fine pustule; the first pustule from the inoculation, which was cauterized and dressed with aromatic wine, was almost well.

The bubo was indurated at its base, it was dressed with ung. mercur. and cataplasms.

Aug. 29th. The chancre of the frenum was healed, that of the prepuce was cicatrizing; the surface of the bubo presented some fleshy granulations; the engorgement of the base was decreased.

On the left thigh, the pustules resisted the cauterization; they were dressed with the aromatic wine.

Sept. 10th. The chancre on the prepuce was almost healed. The same dressing of aromatic wine was used, with an additional tannin.

20th. The chancre of the frenum was cicatrized; the inoculations on the thigh were in a fair way of reparation.

30th. The thigh was healed, and the bubo covered with fleshy granulations; it was slightly cauterised to make it cicatrize.

Oct. 3rd. All being well, the patient was dismissed.

CASE II. Primary chancre and gonorrhœa; inoculation positive in the first case, negative in the second.

Jean Bart—, aged 17, received May 23, 1836. Five weeks previous, the patient having torn the frenum in a coition, the wound became chancreous; two days later, a gonorrhœa appeared; it seemed, however, that here were two infections, for the patient had connected with a woman eight days previous to the appearance of the gonorrhœa. He had been treated for these two infections by an apothecary.

May 29th. The pus of the gonorrhœa was inoculated on the left thigh, and the pus of the chancre on the right; injections of nitrate of silver and four drachms of cubebæ per diem were ordered for the gonorrhœa; the chancre was dressed with aromatic wine, and cauterized with nitrate of silver.

June 1st. The puncture made with the pus of the chancre had produced the characteristic pustule; the pus of the gonorrhœa had produced nothing; ordered emulsion of copaiva.

10th. The gonorrhœa was cured, the chancre of the penis had disappeared, and the pustule from the inoculation was destroyed by the caustic.

17th. The patient was dismissed cured.

CASE III. Chancre and gonorrhœa; the inoculation of the chancre productive, that of gonorrhœa negative.

Cour— Claud, aged 26, entered June 19, 1835. In this patient the gonorrhœa made its appearance three days after a suspicious connection; two days later, chancres appeared at the base of the glans. The gonorrhœa was very painful, and the discharge very copious at the commencement. The matter flowing from the urethra was still

bloody; but the patient did not suffer in passing his water; the chancres were still at the period of ulceration; the chancre pus was inoculated on the right thigh, and that of the gonorrhœa on the left.

June 2nd. The puncture on the right thigh had produced the characteristic pustule, that on the left was cicatrized. These results were shown in the clinic held in the amphitheatre of the Ecole de Médecine, and then cauterized with nitrate of silver; the gonorrhœa was treated with injections of acetate of lead and copaiva; the chancres by cauterization and aromatic wine. The patient was dismissed cured, July 18th.

CASE IV. Chancre, inoculation of a wound of the finger, axillary bubo, engorgement of the plica brachii; inoculation with positive result.

Gou——, aged 34, entered August 12, 1836. This patient had contracted chancres on the glans about four weeks ago. About a fortnight since, the forefinger of the right hand, was torn in three or four places by accidentally being under a cask of wine. During the first day, the wound had a good appearance; but the patient, who used the wounded hand to apply the dressings to the chancres of the penis, soon found his finger ulcerate, the wound become dark and greyish, and lymphatic engorgements develop themselves in the axilla and plica brachii.

We found the chancres of the penis almost healed; the lymphatic engorgements hard and of considerable volume, but not painful when touched; the pus gathered from the surface of the wound of the finger was inoculated; the chancres were dressed with aromatic wine, and cauterized with nitrate of silver.

August 21st. The puncture with the pus of the finger had produced the characteristic pustule; the bubo did not seem to progress towards suppuration; they were dressed with ung. hydrarg. and cataplasms.

Sept. 6th. All was healed except the ulceration on the thigh, which had been allowed to take its course, but it was in a fair way towards reparation.

Sept. 10th. The patient was dismissed cured.

CASE V. Encysted chancre, on making its appearance by an abscess of the scrotum; inoculation with a positive result.

Boucl——, aged 60, received April 25, 1835. A few days after an impure connection, the patient perceived two chancres on the skin of the penis.

We found some points of the surface of the chancres at the period of reparation, each of them was about the size of a shilling; toward the middle of the scrotum, about an inch from the penis, there were two hard knots, situate in the substance of the skin with induration of the surrounding parts; the larger appeared suppurated in its centre;

it was opened and the thin, bloody pus inoculated on the right thigh; the ulcers were dressed with opiated cerate.

The 27th. The puncture, made with the pus of the encysted chancre of the scrotum, had produced the characteristic pustule, it was allowed to develope itself. The second chancre was opened; the ulcers were cauterized, and dressed with the opium cerate.

June 2nd.* The chancre on the thigh was dressed with aromatic wine; those on the penis were healed, and those on the scrotum were in the way of reparation; and the patient was dismissed cured on the 20th. These chancres, which commence by an abscess, whose parities become indurated, so as to form an actual cone before they are opened, in all respects deserve the name of encysted chancres.

CASE VI. *Chancres and acute gonorrhœa, contracted in a single coition; inoculation yielding a result positive for the pus of the chancre, and negative for that of the gonorrhœa.*

Cor—— Edward, aged 21, entered June 20, 1835. The commencement of this disease was six weeks previous. The day after the connection, chancres appeared on the frenum and prepuce; two days later, an acute gonorrhœa declared itself, and occasioned much pain.

The chancres had been treated with precipitate and dressings of ung. mer.; further, he had been cauterized with arg. nitr. and had taken 60 mercurial pills, from another hospital.

The chancres were still in the period of increase, the gonorrhœa afforded a greenish and bloody matter; the chancre was inoculated with two punctures on the right thigh, and the gonorrhœal pus on the left; the chancres were cauterized with arg. nitr. and dressed with vin. arom. and an injection of acet. plumb. was ordered.

June 24th. The two punctures made with the pus of the chancre had produced the characteristic pustule; the upper was cauterized, and the other allowed to develope itself; the punctures made with the pus of the gonorrhœa had produced nothing; the same treatment was continued; the gonorrhœal pus was again inoculated.

28th. The inoculation of the gonorrhœal pus, made on the 24th, had produced nothing; the chancres were in the stage of reparation; the gonorrhœa discharged little whitish matter; the inoculated pustule, which had been allowed to remain, had produced a chancre on the thigh; it was cauterized and dressed with vin. arom.

July 14th. The gonorrhœa had disappeared under the treatment with injections and copaiva with magnesia in the form of bolus; the chancres were cicatrized.

18th. The patient was dismissed cured.

CASE VII. *Superficial and follicular chancres, producing the characteristic pustule by inoculation.*

Bour——, aged 20, entered August 25, 1836. The commence-

* Quere—May 2d. H. D.
10

ment of the disease dated from about twenty-four days since: after a difficult sexual connection, erosions formed upon the glans, whose base was surrounded by a crown of small round ulcers, occupying the depth of the follicles; the edge of the prepuce presented superficial ulcerations, which are called superficial chancres. He has hitherto had no treatment.

In consequence of the irritation, there was a phimosis, which allowed the diseased organ being partly uncovered; there was no discharge from the urethra; there were small ulcers in the period of progress, upon all the surface which could be perceived; the suppuration was copious. The pus gathered from a superficial ulcer, which had scarce destroyed the thickness of the mucous membrane of the glans, was inoculated. On the left thigh, the pus from a follicular chancre, whose orifice was scarce as large as a pin's head, was inoculated. There was no lymphitis; but there was an engorged ganglion on the left side, which was movable and indolent.

This patient had never received any medical treatment; he was treated according to M. Serres, with iodide of silver, a twelfth of a grain per diem; an emulsion of gum arabic as diet drink. The chancres were washed and dressed with a decoction of mallows.

Sept. 1st. The inoculations having produced the characteristic pustule on both thighs, they were cauterised with nitrate of silver.

7th. The pustule on the left thigh had disappeared, after being cauterized; that on the right, was still red; it was dressed with aromatic wine, and the fleshy granulations were cauterized; six doses of a twelfth of a grain of iodide of silver were given, without obtaining any therapeutical action.

Till the 1st of October, the dose of the iodide was gradually increased, without the patient feeling any effect; the disease was neither better nor worse than if left entirely to itself. The dose was four grains of the iodide per diem.

It was determined to suspend a medicine which produced no result, and the ulcerated surface was cauterized, and then lint dipt in aromatic wine applied.

The 4th. The superficial ulcers of the glans were almost dry, the ground of the ulcerated follicles was raised and projected like granulations at their commencement; they were cauterized and dressed with the wine.

The 6th. All was nearly well, only one or two points remaining uncicatized on the margin of the prepuce; and the patient was dismissed cured on the 10th.

CASE VIII. *Regular chancre; inoculation with a result.*

Jos—Emillie, aged 24, entered May 27th, 1834. The apparent commencement of the disease was about eight days previous. On the internal surface of the greater labia and the entrance of the vulva, some little pimples made their appearance four days after a suspicious connection, and soon, as by regular inoculation, chancres form-

ed; there was neither pain in passing the water nor vaginal discharge. The ulcerations were in the period of increase.

On the 23th, pus gathered from the surface of a chancre of the great labia, was inoculated on the right thigh, and that taken from the vulva on the left. It was observed that the induration on the great labia gradually extended, and caused acute pains; emollient dressings were ordered.

On the 29th, the inoculated points were red and vesicular, and on the following day the vesicle was well formed on both thighs.

June 1st. The inoculated pustule was full of pus, flat and broad.

The 6th. The inoculated points were cauterized with nitrate of silver. The ulcerations of the vulva remained in the stage of increase and were very painful; they were touched with a brush dipped in creosote. Half an hour after the application, the patient had acute darting pains; but by the following day they had subsided.

The 18th. The ulcerations were touched each day with creosote; they appeared arrived at the period of reparation; but their base was indurated all around, as well as the tissue of the labia.

The 22nd. Pills of hydrarg. iodid. were ordered as a resolute. There only remained brownish spots instead of the chancre from inoculation. At the anus there was some degree of irritation, and a rhagas; it was dressed with lint dipt in liq. sodæ chlorinatæ, and sprinkled with calomel.

July 10th. All the ulcerations had disappeared, the still existing induration was much diminished, and on the 22nd, the patient was dismissed quite cured.

CASE IX. *Chancre of the cervix uteri, vaginal gonorrhœa; inoculation with characteristic result.*

Haul— Catherine, aged 23, entered April 8, 1834. Scarce cured of one infection seven months since, when having again exposed herself, contracted chancre and a gonorrhœa, of a person affected with only a chancre. She had undergone no treatment. It ought to be remarked, that this patient had long been affected with a chronic discharge, which gave a gonorrhœa to each of her new lovers, then, if after being cured they continued their relations with her, by a sort of acclimation, they resisted the contagion.

On her entering the hospital, she had a chancre on the left labium, and another on the corresponding nympha. When examined with the speculum vaginæ, puriform secretion, uterine catarrh, ulceration of the anterior lobe of the cervix, with a greyish ground, irregular and raised edges were found.

Till the 10th, emollient injections were made and the chancre was dressed with opium cerate.

The 18th. The acute stage had disappeared, the matter of the discharge was whitish and less abundant; the appearance of the ulceration of the cervix had undergone no change; some pus taken from its surface was inoculated on the right thigh, then some muco-pus was

collected at the base of the cervix, in the pori-uterine *cul-de-sac*, and by means of a puncture inoculated on the left thigh. The different ulcerated points were cauterized with nitrate of silver.

The 19th. The inoculated points were red and elevated.

The 20th. The vesicle was well formed, both on the right and left thigh, and the pustule was on the 22nd well filled with pus.

May 1st. The inoculations having been allowed to take their course, had produced well characterized chancres, with abrupt edges and a greyish ground. They were cauterized and dressed with ung. calom. c. opii. The Chancre on the nympha had disappeared, under the influence of the cauterization; that of the labium was in progress towards reparation. Injection and tamponing with decoct. alb. *eau blanche** were ordered. The ulceration of the cervix, having been cauterized six times, was much diminished; the portion which remained, presented a granulated surface, which was inclined to cicatrize.

The 10th. The chancre of the anterior labium had healed. The spots inoculated presented granulations; the base of the ulcers was become indurated.

The 20th. The induration around the different chancres had increased. The wound of the cervix was healed; the gonorrhœa had disappeared. Pills of hydrarg. iodid, were ordered, and sudorific syrup and tisane, to overcome the induration.

The 30th. There had been rapid amelioration. The inoculated points were healed, and the induration had almost disappeared.

June 7th. All was well; on the thigh only some brown spots remained.

CASE X. *Chancre and symptomatic bubo, inoculated with result.*

Bou——, aged 21, entered March 7, 1833. The complaint was of five months standing, at that time a chancre had appeared upon the skin of the prepuce; a few days afterwards a bubo showed itself on the right side; the progress of the ulcer, which had at first been regular, assumed the phagedenic character; a considerable portion of the prepuce was destroyed, and a third of the thickness of the glans itself eaten away; the bubo quickly came to suppuration, and opened spontaneously. A course of bichloride of mercury was administered, in the form of pills; a considerable salivation ensued, which was counteracted by gargarisms. On the above-named day, the patient presented himself with a widely ulcerated bubo, the surface of which was two inches and a half in diameter.

The glans was almost detached, and the corpora cavernosa presented a loss of substance down to the urethra, there was also much general irritation. The characteristic signs of the period of increase were every where visible. Dressings, with a concentrated decoction of opium were applied, and general antiphlogistics prescribed. By the 18th, the inflammatory state seemed to have yielded to the treatment; dressings of calomel cerate were then applied.

On the 21st, the chancre of the groin was better; its ground was

* See note to Formulary, at the end of the work.

becoming clean; some healthy granulations showed themselves on the penis.

April 1st. The chancre of the glans was cauterized with nitrate of silver, and the dressings with colomel cerate were continued.

10th. The circumference of the ulcer of the groin was diminished; yet in the centre, the characters of the ulcerative period were perceived.

21st. Some pus taken from the centre of the wound in the groin was inoculated on the left thigh.

24th. The inoculation had succeeded, and the pustule was formed. Some spots of the commencement of an irruption being perceived upon the skin, the pills of hydrarg. iodid. were prescribed, with sudorific syrup and tisane.

May 7th. The bubo was cicatrizing; but the chancre on the penis remained in the stage of ulceration. It was cauterized with arg. nitr.

20th. The chancre of the groin was cicatrized, without leaving any marked induration. The inoculated chancre on the left thigh was at the period of reparation. A lenticular syphilide appeared, but developed itself but little; and on the 30th, presented only a few brown spots.

June 20th. The syphilitic eruption had quite disappeared.

Notwithstanding the different dressings employed, such as the mel. iodat. cerat. plumb., wine, cerat. belladon., decoct. opii concentr., solution of sublimate, cauterization with arg. nitr. and hydrarg. nitr. applied alternately, according to the more or less inflammatory state of the parts, the ulcer of the penis remained at the period of increase; all the superior portion of the prepuce had been destroyed, and the glans eaten away four lines beyond the meatus urinarius; the canal appeared as if dissected all around.

July 10th. The progress of the ulceration appeared much slower; it was cauterized and dressed with calomel and opium cerate.

20th. More defined; the anterior half of the chancre began to cicatrize.

30th. At the inferior part towards the fenum, the remaining portion of the prepuce was covered with granulations; but on the superior, the chancre continued to destroy the corpora cavernosa.

Aug. 20th. The cicatrization had retrograded.

The 30th. Pus was taken from the surface of the corpora cavernosa, and inoculated an inch below the cicatrix of the first inoculation.

Sept. 4th. The pustule from inoculation was formed. The ulcer was dressed with the calomel and opium cerate, and cauterized.

20th. The characters of the period of reparation showed themselves in several points of the surface of the chancre: The chancre of the thigh, resulting from the inoculation on the 30th of August, was dressed with cerat. opiat.

Oct. 1st. The chancre was reduced two-thirds; pus was taken from its centre, and inoculated by two punctures on the right thigh.

The 6th. The inoculation had produced nothing.

20th. The ulceration had seized upon an indurated band, near the enum it resembled an interstitial gangrene.

Nov. 1st. The ulcer, which had for some days appeared stationary, appeared better.

27th. All is nearly well; on the corpora cavernosa, there was a cicatrix more than an inch in extent. The wound of the left thigh, from the last inoculation but one, was nearly cicatrized.

At length, Dec. 21st, the patient was dismissed.

It is worthy of remark, that during all the time of the treatment, the general health remained pretty good; only twice toward the latter part of the time, at an interval of two months and a half, there was a slight diarrhœa, which soon yielded to a mixture of rice water, and gum arabic sweetened with syrup. symphyt. The patient was of a sanguine and irritable temperament; during all the time of his being in the hospital, he appeared very melancholy; being continually hungry, he often procured himself food besides his regular rations.

CASE XI. Phagedænic chancre, partly gangrenous; inoculation producing a pustule from the ulcer in a progressive stage, but without result from the pus of the gangrenous part.

Pers——, aged 40, entered April 13, 1834. The commencement of the disease was two months and a half previous; in consequence of an erosion of the prepuce during coition, a chancre appeared; its course was at first regular; but after repeated excesses, an attempt at cauterization with a burning cigar, the ulcer assumed an acute inflammatory and phagedænic form.

At the time of his entry, nearly the whole surface of the prepuce was affected, but two portions appeared distinctly separated; all the parts touching the roll at the base of the glans presented a gangrenous ring; the remainder presented the characters of a phagedænic chancre, properly so called; all was in the progressive stage.

The 14th. Some pus, taken from the ring at the base of the prepuce, was inoculated on the right thigh; an application of a concentrated decoction of opium was ordered.

The 18th. The inoculated puncture had produced nothing; the gangrene seemed checked. Some pus was taken from the surface of the prepuce, towards the margin, beyond the limits of the gangrene, and inoculated on the left thigh. Dressings of calomel cerate were ordered, and the ulceration, from the destruction by the gangrene of a part of the glans, and that produced on the frenum by the phagedænic chancre, was cauterized with arg. nitr.

The 21st. The inoculated puncture had produced the characteristic pustule.

The 26th. The progress of the inoculation, hitherto regular, appeared to assume the phagedænic form; it was profound and rapidly destroyed the tissues. Dressings of calomel and opium ointment were used, with cauterization with arg. nitr.

The 30th. There was an improvement, the chlorinated soda was used as a wash and calomel was sprinkled upon the part.

May 9th. The penis was nearly well; the inoculated chancre was in a fair way of reparation.

CASE XII. *Chancre and gonorrhœa; inoculation positive in the first case, and negative in the second.*

Cha——, aged 20, entered August 9, 1836. This patient, affected with gonorrhœa, which at the commencement was very painful, and with chancres at the base of the glans on the under part, presented himself five weeks after the commencement of the disease. He had already undergone several treatments, but only with antiphlogistics. At the time of his entry, there was a very considerable gonorrhœal discharge, and a balanitis; the chancres of the corona glandis presented several points in a state of reparation.

The pus of the gonorrhœa was inoculated on the right thigh, and the pus taken from a point on the base of the glans, still presenting the characters of the period of ulceration, on the left thigh.

August 14th. The inoculation of the pus of the chancre, on the left thigh, had produced the characteristic pustule; the puncture made with the pus of the gonorrhœa had produced nothing. Emulsion of copaiva, and injections of nitrate of silver, were prescribed, and the chancres ordered to be dressed with vin. arom.

The patient was dismissed cured, Sept. 7th.

CASE XIII. *Chancre and gonorrhœa; the pus of the inoculated chancre producing the pustule; the pus of the gonorrhœa, a negative result.*

Depl——, aged 22, entered April 29, 1836. After a balanitis, for which the patient received no treatment, some vegetations developed themselves on the glans; they were cut, and three days afterwards, after a coiton, chancres showed themselves on the spots where the vegetations had been. At the same time a gonorrhœa, which occasioned acute pain, developed itself.

May 1st. The pus of the ulceration of the glans was inoculated on the right thigh, and the pus of the gonorrhœa on the left.

The 4th. The puncture on the right thigh was red and slightly vesicular; that on the left, was entirely cicatrized. Dressings with aromatic wine were used, and the chancres were cauterized. For the gonorrhœa, which no longer caused the patient any pain, an injection of nitrate of silver and an emulsion of copaiva were ordered.

The inoculated pustule was cauterized with nitrate of silver; and the patient was dismissed cured, on the 16th of May.

CASE XIV. *Chancre of the prepuce, with concealed chancre, (larvè) and abscess of the canal; inoculation with positive results in all cases.*

Bel——, aged 19, entered July 18, 1836. This patient, who had been affected for four years with a gonorrhœa, which he several times renewed, and brought back to the acute stage, by impure connection, had contracted several chancres on the prepuce, three weeks since. The gonorrhœa, which only furnished a serious pus, had increased and occasioned acute pains. At the time of his entering, the canal

presented several indurated points in its extent, principally towards the fossa navicularis. The chancres of the prepuce were in the stage of increase.

July 20th. The pus of the gonorrhœa was inoculated on the right thigh.

22nd. The puncture was red, but its progress was slow.

23rd. The pus of the gonorrhœa was inoculated on the right thigh, below the former puncture, and the pus of the chancre of the prepuce on the left thigh. The ulcer on the prepuce was dressed with vin. arom., and cauterized with argent. nitr.

25th. The puncture made on the 20th with the pus of gonorrhœa, had produced the characteristic pustule; it was cauterized with argent. nitr., and injections of vin. arom. were ordered: the two latter inoculations were red. On the under side of the penis, near a point which corresponded to an induration of the canal, some fluctuation was perceived.

The 27th. The punctures made with the pus of the chancres of the prepuce, and the second time with the pus of the gonorrhœa, had produced the characteristic pustules, which were then cauterized with the nitrate of silver. The tumor on the side of the canal was about the size of a nut; the skin was become thin; being opened, a pus flowed from it similar to that of the gonorrhœa. The cavity presented all the characters of surfaces affected with chancres; moreover, from some drops of urine which flowed through it when the patient passed his water, it was clear that it communicated with the canal. To be certain that it was not a chancre of the urethra, which had progressed outwards from within, the pus which flowed from it, upon opening the abscess, was inoculated on the left thigh. The punctures of the first inoculation had disappeared after the cauterization with nitrate of silver; the chancre on the penis was almost healed; but the canal was indurated to the backwardest part of the penis. The injections of vin. arom. were continued, and the interior of the canal was cauterized by means of Lallemand's caustic holder. The pills of hydrarg. iodic. were prescribed.

Aug. 3rd. The pustules resulting from the inoculation of the pus of the abscess of the canal were cauterized; the induration was much diminished.

Aug. 9th. The pustule was healed; the abscess of the penis nearly closed; and no more urine passed.

Aug. 20th. There was scarcely any more induration in the canal, and the discharge had nearly ceased; four drachms of cubebs were prescribed, and Sept. 12th the patient was dismissed cured.

CASE XV. Concealed chancre, (larvé,) with symptomatic bubo; inoculation producing positive results in each case.

Dum——, aged 26, entered Nov. 11, 1835. Was not able to fix accurately the time of the commencement of his complaint. He stated that he had six weeks previous felt a slight pain at the meatus uri-

narius, when he passed his water ; but paid little attention to it till a fortnight previous to his entry, when a bubo appeared on the right side. Its course was very acute ; but the patient had not undergone any treatment. Upon his entry into the hospital, some induration was perceived at the meatus urinarius, and towards the fossa navicularis. Upon separating the edges of the aperture, no ulceration was perceived ; upon pressure, a little pus came ; the canal of the urethra appeared sound beyond the above mentioned point. The patient never, at any time, perceived a gonorrhœal discharge. The only pains he felt were in the meatus urinarius, and in the fossa navicularis. The bubo was extensively suppurated ; it was opened, and a large quantity of reddish pus was discharged.

Nov. 23rd. The pus from the meatus urinarius, was inoculated on the right thigh, and the pus of the bubo on the left. The lips of the incision made on the bubo were ulcerated. The bubo was cauterized with nitrate of silver ; some threads of lint, covered with calomel and opium cerate, were introduced into the canal ; cataplasms were applied to the groin.

28th. The inoculated punctures have taken and produced the pustules ; they were allowed to take their course. Near the frenum, a small hardened tumor was perceived. The same dressings were continued.

Dec. 1st. The chancres of the thighs, from inoculation of the pus from the urethra and from the bubo, were cauterized with nitrate of silver, and dressed with calomel and opium cerate.

12th. A small abscess, the consequence of the suppuration of the tumor, perceived on the 28th ult., was opened, and the pus inoculated, by a puncture, on the right thigh.

17th. The inoculated puncture, made with the pus of the chancreous abscess, opened on the 12th, had produced the characteristic pustule.

20th. The pustule, from inoculation, which broke the day previous, was inoculated. Little induration remained at the meatus urinarius. The bubo was better ; it was cauterized with nitrate of silver.

27th. Altogether better. The chancres on the thighs were nearly healed, under the influence of the cauterizations and dressings with the calomel and opium cerate.

30th. The patient being cured was dismissed.

CASE XVI. Chancre and gonorrhœa, with an ulcer of the canal ; inoculation producing the characteristic pustule.

Fouc—, aged 19, entered July 19, 1836. The apparent commencement of the disease was eight days before his entrance into the hospital ; the chancre was situated at the posterior and superior part of the glans, and from this point an inflamed lymphatic ran to the right, towards an engorgement which began on the same side, and which appeared to affect the superficial ganglions of the groin ; the tumor, though small, was painful, and the skin very red. The gonorrhœa, which had only appeared eight days previous, afforded but little

pus; the patient refers the pain, which he felt during the emission of his urine, to the end of the penis.

20th. Twenty-five leeches were placed upon the bubo, and the camphor and opium pills were prescribed. Upon separating the lips of the meatus urinarius, the mucous membrane was found ulcerated.

25th. The gonorrhœal pus was inoculated, by a puncture, on the right thigh. The development of the bubo appeared arrested; emollient cataplasms were ordered. The chancre was cauterised, and dressed with the vin. aromat. The nitrate of silver was introduced into the urethra, to cauterize the ulcerations of the meatus.

23th. The pustule, from the inoculation, being formed, was destroyed with the nitrate of silver. Towards the posterior part of the penis, a leech-bite having become inoculated, it was cauterized. The bubo had not developed itself; the chancre was half healed, and the granulations appeared on several points.

Aug. 6th. The chancre on the glans was healed; scarce any thing flowed from the urethra; cauterization with nitrate of silver was prescribed.

10th. Nothing remained in the urethra; the bubo had disappeared, under the influence of compression, and applications of the decoct. alb.

The patient was dismissed cured, on the 16th.

CASE XVII. *Gonorrhœa, urethral chancre, and inoculation with positive result.*

Pri—, aged 20, entered Oct. 28, 1836. This patient had had a gonorrhœa for six weeks, which, after being acute for some days, soon became chronic; since this time, having again had a sexual connection, he perceived a chancre about a fortnight previous to his entry, which was visible upon separating the lips of the meatus urinarius. Upon examining him, we found the matter of the discharge whitish, and streaked with brown; there was no induration in the urethra, except at the meatus, where it was easy to detect the characters of the chancre with an indurated base. Upon separating the lips of the orifice, the ulcer was perceived, small in its extent, but presenting the characters of the period of increase.

29th. The pus collected at the meatus, mixed with the secretion of the chancre and gonorrhœal matter, was inoculated on the right thigh, by a single puncture. The chancre was cauterized with the nitrate of silver, introduced to the depth of an inch into the canal, and then a piece of lint dipt in vin. arom. was inserted.

31st. The inoculation had taken and produced the characteristic pustule, which was large, and distended with pus; it was opened and well cauterized with nitrate of silver. The whole surface of the urethra was cauterized with Lallemand's caustic holder; for the chancre, the same dressings were continued.

6th. The chancre was almost cured; the induration of its base was diminished; there was but little discharge from the gonorrhœa; a fresh general cauterization was made.

11th. All was well, except that the induration seemed to continue at the seat of the ulcer at the meatus.

CASE XVIII. *Chancre, concealed chancre, and symptomatic bubo; inoculation producing the characteristic pustule.*

And——, aged 29, entered April 26, 1836. The patient could not exactly fix the time of the commencement of his disease; for a long time, at short intervals, he had contracted chancres; the last chancre, which was seated on the frenum, had its origin about six weeks previous to his entrance. Twenty-six days since, after some very fatiguing work, an acute bubo appeared in the left groin. The patient did not abstain from sexual relations till within the last fortnight; about that time, he felt a tickling sensation at the meatus urinarius, then a smarting upon making water; he at length perceived that on pressing against the inferior side of the canal, he caused several drops of pus to be discharged.

When we examined him, we found the chancre on the frenum was partly at the period of reparation; the bubo had suppurated; its seat was in the superficial ganglions; the tumor was conical and fluctuating. Upon opening the lips of the meatus urinarius, the mucous membrane appeared red, but not eroded; he had little pain in passing his water; a hardened point was felt a few lines behind the fossa navicularis.

27th. The bubo was opened, and afforded much thin and bloody pus. The pus from the urethra was inoculated on the left thigh, and that taken from a point of the surface of the chancre, which still appeared stationary, on the right thigh.

29th. The inoculated punctures had produced the characteristic pustule on both thighs; the pustule on the right thigh, from the inoculation of the pus of the chancre, was cauterized with nitrate of silver; that on the left, from the pus from the meatus, was allowed to take its course.

The chancre and the bubo, whose ulcerated opening showed its chancrous nature, were dressed after cauterization, with aromatic wine; the induration of the canal had increased, as well as that at the base of the chancre; the syrup. acid. hydrocyan. with syrup. gentian. in an infusion of hops were ordered, on account of the lymphatic temperament of the patient.

June 3rd. Upon separating the lips of the meatus urinarius, the mucous membrane was found ulcerated; the nitrate of silver was introduced into the urethra, then injections of aromatic wine were made. The pustule from inoculation on the left thigh, had produced a chancre, which was cauterized and dressed with aromatic wine.

10th. The chancre of the frenum was almost healed, and the bubo tended towards reparation.

15th. The induration on different points soon became softened; the surface of the bubo became covered with granulations. The cauterization and the dressings with aromatic wine, were continued.

The patient was dismissed quite cured on the 25th.

CASE XIX. *Chancre, concealed chancre, and inoculation producing the characteristic pustule.*

Bal——, aged 20, entered January 3, 1837. This patient contracted a chancre of the frenum, in consequence of a rupture of it during a connection, a month previous to his entry; eight days later, a gonorrhœa appeared; it first caused a few drops of a bloody discharge, which increased for some days, every time that the patient committed an error in his diet. We found the chancre of the frenum in the stage of reparation; the discharge was small in quantity and bloody, and there was some pain on passing the water.

The 4th. The pus of the urethra was inoculated on the left thigh by a puncture; the chancre of the frenum was cauterized and dressed with vin arom.

The 6th. The inoculation had succeeded and the pustule was formed; an inch and a half in the interior of the canal an indurated point was perceived. The interior of the canal was cauterized, and injections of the wine with tannin ordered.

The 12th. The chancre of the frenum was healing; its course had been regular since the cauterization of the urethra; the induration was much diminished; the discharge was the same in quantity but less bloody.

The pustule on the thigh, produced by the inoculation of the pus from the urethra, had progressed, notwithstanding a cauterization on the 10th; but on the 13th, the character of the ulcer was no longer chancreous; there remained a deep wound from the cauterization, which was dressed with vin. arom.

The 24th. The chancre of the frenum had healed without leaving any induration, with the application of the nitrate of silver and dressings with the wine; the urethral discharge had nearly disappeared.

The 30th. Nothing remained, not a single drop of the discharge, and on the sixth of February, the patient was dismissed cured.

CASE XX. *Gonorrhœa, concealed chancre; a positive result from inoculation, during the period of ulceration, and negative, during that of reparation.*

Br——, aged 19, entered March 9, 1833. Three days after a suspicious connection, this patient perceived a discharge of some drops of pus from the urethra; the secretion gradually increased; he had acute pain on passing his water, irritation of the glans and phimosis, which however allowed of the organ being two-thirds uncovered, when a slight redness was perceived on it, but no excoriations.

March 11th. The pus of the gonorrhœa was inoculated upon the right thigh by three punctures. The pil. opii. c. camph. were ordered, and emollient lotions.

15th. The inoculations had produced the pustule; but it was not much developed. The gonorrhœal pus was again inoculated on the left thigh.

The 17th. The pustules, both right and left, had furnished the

pathognomic character. On the right thigh, the first inoculation had produced chancres with abrupt edges, which had pierced the whole thickness of the skin. Upon pressing the canal, near the fossa navicularis, an induration was perceived, indicating the seat of a chancre; the treatment was continued.

The 22nd. The appearance of two buboes was perceived, and leeches were applied to each tumor. Two days previous, the patient chafed himself near the frenum, the pus from the urethra had inoculated the wound, and caused a severe irritation; the prepuce became œdematous, and a phimosis ensued. The chancres on the thighs were dressed with cerat. opii.

The 17th. Pills of hydrarg. ioidid. were ordered, to combat the induration, and injections of acet. plumb. for the gonorrhœa.

April 6th. The chancre inoculated on the chafed part had nearly destroyed the frenum. The discharge was much diminished, and the matter had lost its greenish color.

The 10th. The patient complained of soreness of the gums; the mouth was irritated, but there was no salivation; the gums were touched with acid. hydrochlor. as a prophylatic. The muco-pus of the urethra was inserted by three punctures on the left thigh, below the second inoculation, which was cicatrizing.

The 18th. The puncture had produced nothing; there was less induration in the fossa navicularis, and the urethral chancre was found to be arrived at the period of reparation.

May 1st. The chancres on the thighs were nearly healed, and little discharge remained.

3rd. There was no more induration; the chancre of the frenum was healed; the pills were omitted, and the patient left the hospital on the 14th.

CASE XXI. Chancre and symptomatic bubo; inoculation producing a positive result.

Leg—Leonard, aged 18, entered October 12, 1835. For about a fortnight he had perceived some chancres on the glans; four days after their appearance, a bubo developed itself on the right side; its course was acute, and it was opened October 14th.

The 16th. The pus of the bubo was inoculated on the left thigh, and that of chancres on the right.

The 21st. The two punctures had succeeded and the pustules were formed; some of the pus taken from the pustule on the left thigh was inoculated on the right; the first inoculation had been destroyed with caustic; the chancre of the penis and the bubo were dressed with aromatic wine.

The 24th. The puncture made with the pus of the pustule on the left thigh had produced the characteristic results; it was allowed to take its course.

The 29th. The chancres of the penis were healed and the bubo in a fair way of reparation; the chancres of the right thigh, or the last inoculation, were dressed with aromatic wine, and cauterized with arg.

nitr.; the two former inoculations had disappeared, under the influence of the cauterization.

It was remarked, that the inoculation made on the right thigh, by means of the pustule from the first inoculation of the pus taken from the bubo, had made rapid progress. The patient was dismissed cured.

M. Cullerier has seen these inoculations, and observed their development, and also publicly acknowledged that the pus of a bubo is capable of being inoculated.

CASE XXII. *Primary chancre of the anus, inoculated with a result.*

Tomb—— Barbe, aged 23, entered April 2, 1833. A month previous, this patient had had intercourse, *à præcosterâ venere*, with her husband who was affected with chancres; the raphe was torn, and the chancreous pus directly inoculated: on the lateral portions, two other abrasions became ulcerated by the same action. A fortnight previous, she had consulted a surgeon, who ordered an application of six leeches; the leech-bites being soiled by the pus from the anus, became inoculated.

April 4th. The different chancres were dressed with opium and calomel cerate.

26th. The chancres, from the inoculation of the leech-bites, had healed, as well as the lateral chancres of the anus; but the ulcer of the raphe, in the depth of the fissure, presented all the characters of the period of increase; its pus was inoculated on the left thigh.

The 28th. The inoculation had succeeded; the pustule was destroyed by cauterization with arg. nitr. The anus was dressed with a bit of lint, the lower end having been dipt in sod. chlorinat.; the edges of the fissure of the raphe were separated, and some threads of lint, covered with calomel ointment, were introduced.

May 6th. The cauterization had destroyed the inoculated pustule. The chancre of the anus was nearly healed, and it was only superficially cauterized.

The patient being cured, was dismissed on the 10th.

CASE XXIII. *Chancre, rhagades, mucous pustules; inoculation with positive results in the two former cases, and negative in the latter.*

Pier—— Clodilde, aged 16, entered April 2, 1833. This patient had been affected with chancre of the vulva and a gonorrhœa for nearly six months; for the last six weeks, some abrasions around the anus having become inoculated, they formed deep rhagades; about the same time some mucous papulæ developed themselves around the anus.

April 8th. Pus taken from an ulceration of the *fourchette*, was inoculated on the right thigh, and the pus of the mucous papulæ on the left thigh. Cauterization and dressings with calomel and opium cerate were prescribed.

The 12th. The inoculation made with the pus from the chancre of the *fourchette*, had produced the characteristic pustule; that of the pus of the ulcerated mucous papulæ, had produced nothing; the pus of a deep rhagas of the anus, all points of which appeared in the ulcerative period, was inoculated.

The 16th. The inoculation of the 12th had succeeded, and produced the pustule; the anus was dressed with the chlorinated soda and calomel; the chancres were cauterized with nitrate of silver.

The 19th. Better defined; almost all the ulcers had assumed the characters of the period of reparation.

The 21st. Better; almost cicatrized; the mucous pustules had disappeared. The same dressing was continued; and the patient was dismissed cured on the 28th.

CASE XXIV. Chancre; inoculation by the nails; inoculation with pus preserved in a tube, with positive result.

Tang—, aged 32, entered Sept. 20, 1836. Seven weeks previous, this patient had contracted chancres on the margin of the prepuce, which he left without treatment; the ulcers soon became confluent, the aperture of the prepuce contracted, and thus almost formed a phimosis, causing a slight balanitis.

During the previous ten days, the patient had had a little spot, resembling an ulcerated mucous tubercle, upon the left commissure of the lips. It was thought that the disease of the lip was the consequence of the irritation produced by using a pipe, to which the patient was much addicted.

On his entry, the chancres were still in the period of increase, their base was not indurated. The cyanuret of silver was given in doses of three-tenths of a grain per diem. The dressings were made with simple cerate.

The 26th. The dose of the cyanuret of silver was increased one-tenth.

The 28th. An increase of two grains was made; the state of the chancre remained the same; the patient felt nothing that he could attribute to the medicine.

The 30th. The dose of the cyanuret was increased to eight-tenths of a grain.

Oct. 5th. A pustule, perfectly similar to those which result from inoculation, was perceived on the left thigh, at the lower part of the superior third on the inner surface. The patient said, that it came from a scratch with the nail. The state of the chancre of the prepuce remained the same; on the other hand, the patient felt no effects of the cyanuret of silver; the dose was increased to three grains. Some pus was taken from the pustule of the left thigh, and inoculated, by a puncture, on the right thigh.

The 8th. The inoculated puncture had produced a well filled pustule, from which a glass tube, open at both ends, was filled. The nature of the inoculation by the nails of the patient being known, it was cauterized with nitrate of silver.

The 10th. The pus preserved in the tube was inoculated, by a puncture, below the first inoculation on the left thigh.

The 11th. The inoculation of the preserved pus had produced the characteristic pustule. The patient was taking four grains of cyanuret of silver; the chancres were better, and produced fleshy granulations.

12th The pustule, from inoculation of the pus in the tube, was very large. Six grains of the cyanuret were given, without the patient perceiving any effect.

The 14th. The pustule, from the pus preserved in the tube, was cauterized. The first inoculation made with the nails had progressed, although it had been cauterized; it was dressed with cerate. The second pustule, inoculated on the right thigh, had progressed and produced a chancre, which was dressed with cerate.

The 27th. The first and third inoculation were healing; the first especially was nearly cicatrized. At the base of the inoculation on the right thigh, which had not been cauterized, an indurated knot was perceived. Thus, although the cauterization with nitrate of silver had not arrested the progress of the inoculations subjected to its action, they had been so modified in their nature, that being brought back to the state of simple wounds, they tended towards cicatrization, whilst the inoculation, which had not been cauterised, had gone on increasing. In order to promote the cicatrization, dressings of vin. arom. were used.

Nov. 4th. The patient was dismissed cured.

CASE XXV. Chancre, gonorrhœa; inoculation with positive result for the pus of the chancre, and negative for that of the gonorrhœa; inoculation of the chancreous pus with hydrochloric acid and negative result.

Vill——, aged 28, entered September 19, 1836. This patient, who had a natural phimosis, could not precisely state the period at which he had contracted chancres; only that six weeks since, he had perceived a balanitis with swelling of the prepuce. The gonorrhœa, which showed itself nine days after an impure connection, had lasted three weeks; it still remained acute; the patient had not received any treatment.

Upon examining him, we found an abundant greenish yellow discharge from the gonorrhœa; upon uncovering the glans, two ulcerated spots were perceived at its base, and some excoriated points on the prepuce; the ulcers presented an appearance of unhealthy granulation.

The 21st. The gonorrhœal pus was inoculated on the left thigh; there was no induration in the canal. Some pus was taken from the surface of the chancre, and divided into two portions; the first was inoculated on the right thigh, and the second mixed with acid. hydrochlor. was also inoculated on the right thigh, below the puncture made with the unmixed pus. The chancre and balanitis were cauterized,

and then dressed with aromatic wine; injections of the nitrate of silver were ordered.

The 24th. The puncture made with the gonorrhœal pus had produced nothing. At first, on the second day, it became a little red, but the next day it had disappeared. The inoculated puncture, made with the pus of the chancre, had produced the characteristic pustule; but that made with the chancre pus, mixed with hydrochloric acid, had produced nothing, and was healed the following day. The same treatment with cauterization and injections of nitrate of silver.

The 26th. The pustule from inoculation, whose base was somewhat indurated, was cauterized; to the above-mentioned treatment, six drachms of cubebs per diem were added for the gonorrhœa.

Oct. 7th. The chancres were healed; the balanitis had disappeared three days previous; the gonorrhœa flowed but little, and without occasioning any pain.

The 10th. The pustule from inoculation, which had not been destroyed by the cauterization, was dressed with vin. arom. and cauterized.

The 18th. The chancre on the thigh was almost healed, there was no more discharge from the gonorrhœa, and no induration remained where the chancres had been on the penis.

On the 21st of October, he was dismissed cured.

CASE XXVI. Chancre and symptomatic bubo, inoculated with positive result; chancre pus, dried by the heat of boiling water, then being diluted with water, was inoculated, with negative result.

Dern—, aged 29, entered Sept. 20, 1836, had contracted chancres six weeks previous; they were situated on the superior internal part of the prepuce. About a fortnight since, a bubo had shown itself on the left side.

We found the chancres partly at the period of reparation. The bubo was seated in the superficial ganglions; it was very large, and the fluctuation at its summit doubtful. The chancres were cauterized with nitrate of silver, and dressed with vin. arom. A blister was placed on the bubo, which was ordered to be dressed the following day with a solution of sublimate, twenty grains to the ounce of water.

26th. The fluctuation was become evident; the bubo being opened, afforded a bloody and thin pus; it was immediately inoculated on the right thigh. The chancres were quite modified, and tending towards cicatrization. A cataplasm was placed upon the opened bubo, and the same dressings were continued for the chancre.

28th. The inoculation of the pus of the bubo was without result; yet the wound of the opening had become rounded, and its edges assumed a chancreous appearance. A new inoculation was made on the right thigh, with the pus of the bubo.

The 30th. The pustule from inoculation was developed; it was cauterized with argent. nitr. Some chancre pus was collected and

dried in a capsule exposed to the heat of boiling water, some drops of water were then mixed with it, and an inoculation made on the thigh.

Oct. 3rd. The inoculation of the dried pus had produced nothing. The chancres of the prepuce were healed; the bubo was much diminished; dressings of ung. mercur. had been used the last two days, in order to promote the resolution of the base.

The 10th. Dressings of aromatic wine were applied to the bubo, and its surface was cauterized with argent. nitr. No engorgement was felt at the base; and fleshy granulations were produced.

On the 25th, the patient was dismissed cured.

CASE XXVII. Chancre at the period of reparation; inoculated without result.

Bigu—Alexandre, aged 24, entered June 13, 1835. About the first days of May, this patient contracted chancres around the glans near the corona, on the frenum and prepuce; those on the glans had healed with applications of calomel and opium cerate, and cauterization with nitrate of silver. There only remained a chancre with a rose-colored ground situated on the prepuce, and another with a granulated ground, occupying the region of the frenum; they were dressed with opium cerate.

The 18th. The ulcerations, which appeared to remain without modification, were cauterized with nitrate of silver, and dressed with calomel and opium cerate.

The 24th. There was little alteration; the pus from the ulcer, with a rose-colored ground, was inoculated on the right thigh, and that collected on the one with a granulated ground, upon the left; dressings with vin. arom. were ordered.

The 29th. The chancres had made some progress towards healing; the inoculated puncture had produced nothing; the chancres were cauterized and dressed with vin. arom.

The patient was dismissed cured, July 3rd.

CASE XXVIII. Phagedænic diphtheritic chancre, inoculated by the nails in the subclavicular region; inoculation without result with the pus of this latter ulcer, which had arrived at the stage of reparation; sympathetic bubo.

Tug—, aged 23, entered May 10, 1836. Three weeks previous, he had contracted a chancre on the frenum, which at first made little progress; but after an excess in drinking and several nights spent without rest, the ulcer became inflamed, and passing to the phagedenic state, destroyed the frenum and a portion of the substance of the glans; at the same time as the chancre became phagedenic, a bubo developed itself in the right groin; its progress was very indolent.

We found the chancre presenting all the apparent characters of phagedenic chancre; the wound it had caused was deep and its ground covered with a greyish, pulpy, pseudo membrane, resembling the pus

of hospital gangrene; upon the large and indurated bubo, blisters were placed, which were dressed with the opiated solution of sublimate. The chancre was cauterized and dressed with vin. arom.

May 31st. The chancre was better; but some pseudo-membranes still existed on some points of its surface; the bubo had diminished but little; the same dressing was continued; the syrup. hydrocyan. was prescribed.

June 6th. The chancre appeared modified; several points of its surface were at the period of reparation; the bubo had diminished to half; compression was applied by means of a spica bandage; the patient complained of a scratch near the clavicle, which he had made with his nails at the beginning of his complaint, and which since that time had not cicatrized; the wound was about the size of a sixpence, and resembled a chancre, during the period of reparation; the pus it furnished was inoculated on the right thigh; it was then cauterized and dressed with aromatic wine.

The 10th. The inoculation of the pus from the ulceration of the clavicle had produced nothing. The bubo was almost levelled, and but little indurated; the chancre was cicatrizing.

June 30th. The chancre was healed; very little induration remained in its place; the bubo had nearly disappeared.

The patient left the hospital cured, July 18th.

CASE XXIX. *Gonorrhœa, chancre in a state of reparation; inoculation without result.*

Marti—, aged 28, entered June 27, 1836, had been affected with a gonorrhœa of an intermittent nature for more than a year, for which he had never received any regular treatment. A month since, he contracted a chancre on the frenum; we found the urethral discharge whitish; he had no pain in passing his water. The chancre was every where at the period of reparation, and no induration was perceived at its base.

From the commencement of the disease, no symptom had been noticed, which could be referred to a secondary syphilitic affection, and the general health had always been excellent.

The 29th. The pus of the gonorrhœa was inoculated by two punctures on the right thigh, and that of the chancres in the same manner on the left. Injections of acetate of lead and copaiva in the form of bolus, were ordered for the gonorrhœa. The chancre was cauterized and dressed with vin. arom.

July 3rd. The inoculation had produced nothing, either on the right or left side; there was no pustule; the gonorrhœal discharge was much diminished; and the chancre was almost dried. The same treatment was continued.

6th. The discharge had ceased; the chancre was perfectly cicatrized, without leaving any induration. The patient was therefore dismissed.

CASE XXX. *Phagedenic indurated chancre in the stage of reparation; inoculation without result.*

Bouli—, aged 20, entered August 19, 1836, had contracted a chancre on the prepuce, by an erosion of the margin, about two months previous. The ulcer at first of little extent, inflamed in consequence of some errors of diet, and extended to nearly the whole of the margin; a remarkable induration was formed at the base of the ulcer, and its surface assumed the appearance of a phagedenic chancre, destroying the tissues by a kind of interstitial gangrene from excessive induration.

Five or six days after its passing from the regular to this latter form, the body and limbs became the seat of a lenticular syphilitic eruption, and some patches of mucous tubercles developed themselves at the anus. In the right inguinal region, the tension of the ganglions produced some hardness; he had received no treatment whatever. We found his general health good; the digestive functions regular; the temperament was inclined to be lymphatic. The whole surface of the chancre appeared in the stage of reparation; the syphilitic eruption was still in the acute stage; the papules were raised.

The 20th. Some pus, taken from the chancre, was inoculated on the right thigh. Pills of the iodide of silver were ordered, according to the formulary of M. Serres de Montpellier, beginning with a twelfth of a grain pro dose per diem; the patient took a mucilaginous fluid for drink, and the chancre was dressed with cerate.

The 27th. There was no change in the general health, the inoculated point had produced nothing. The dose of the iodide of silver was gradually increased to three-twelfths of a grain.

Sept. 1st. No effect could be observed which it was possible to refer to the action of the medicament; five-twelfths were given.

The 9th. Not the slightest modification was perceived, and the disease followed the usual course, as if it had remained without treatment. The digestive functions were good; the chancre tended towards cicatrization; only the induration at its base remained in *statu quo*. The dose of the iodide was increased.

The 9th. Seven-twelfths were given; on the 12th, a grain; the 20th, fifteen-twelfths; the 26th, seventeen-twelfths; and at length, Oct. 2nd, still without any modification, the dose had been increased to fifty-four-twelfths. Six grains of the iodide were ordered to be taken in the morning, fasting.

The 7th. Eight grains were given in the same manner; on the 10th, the patient took twelve grains of iodide of silver, without experiencing the least action. The syphilitic eruption progressed; the mucous papules at the anus had extended themselves; the induration of the base of the chancre, which was not quite cicatrized, remained. It was then thought proper to abandon M. Serres' treatment, which had so long been followed with such exactitude and without any success. The pills of iodide of mercury were prescribed, the tisane of hops, the anti-scorbutic syrup, and fumigations with cinabar, every second

day. The mucous papules of the anus were dressed with calomel and soda chlorinata.

The 14th. An improvement was already perceived; the papulæ were less raised; the secretion which took place upon the surface of the mucous papulæ, had nearly ceased. Two pills were ordered to hasten the cure; the functions continued quite regular.

The 19th. But few squamæ remained. On the legs, scarce anything remained, but a few brown spots on the thigh, there was nothing more to be seen. The papulæ at the anus were dry; the induration of the prepuce was diminished by half; the ganglionic hardness in the groin had disappeared; the dose of iodide of mercury was increased to three pills.

The 27th. Only a few brown spots remained upon the body and limbs, which became effaced by degrees; the papulæ at the anus had disappeared, as well as the induration on the seat of the chancre on the prepuce.

Nov. 1st. The patient was dismissed quite cured.

CASE XXXI. *Chancre at the period of reparation; inoculation without result.*

Quar—, aged 24, entered July 1, 1835, had been affected five weeks with a gonorrhœa, which was very painful at the commencement, and which showed itself three days after a coition. On the skin of the prepuce, towards the base of the glans, he perceived two ulcerations. He had received no treatment; but a phimosis having supervened, in consequence of the increase of the chancre on the prepuce, the patient entered the hospital, at which time he felt no pain on passing his water, but suffered much at the end of the penis, which was greatly swollen. The skin of the prepuce was of a violet red color; on the underside, two indurated points were perceived, corresponding to the seat of the chancres of the mucous membrane, as pointed out by the patient; leeches were applied to the penis; some pus was taken from the aperture of the prepuce and inoculated on the right thigh.

July 4th. The inoculated puncture had produced nothing; the patient took bolus of copaiva; the glans and prepuce were cauterized with nitrate of silver; the phimosis was no longer in the inflammatory stage.

The 11th. A fresh inoculation was made; pills of hydrarg. iodid. were ordered, on account of the induration which remained at the base of the prepuce; the chancres were cauterized and dressed with vin. arom.

The 12th. The inoculated punctures had produced nothing; the chancres were almost healed; the gonorrhœa had disappeared, under the influence of the copaiva and the injections of acetate of lead.

Aug. 13th. All was healed and the circumcision was made.

The patient left cured Sept. 15th.

CASE XXXII. *Chancres at the period of reparation, gonorrhœa in the acute stage; inoculation without result in both cases.*

Lev—— Pierre, aged 26, entered June 3, 1835, had been affected three weeks with chancres situated on the frenum and corona glandis, for which he had had no treatment. The ulcers, which were in the stage of reparation, appeared much irritated and caused great pain; the patient attributed this state to a cotion two days previous to his entering the hospital: fomentations, with a concentrated decoction of opium, were ordered.

The 5th. An acute gonorrhœa had developed itself; the patient suffered much; the gonorrhœal pus was inoculated on both thighs; and twenty leeches were applied to the perinæum.

The 8th. The inoculations of the gonorrhœal pus had produced nothing; some pus was taken from the surface of the chancre in the stage of reparation, and inoculated on each thigh; the ulcers were dressed with calomel and opium cerate.

The 10th. The punctures made on the 8th with the chancre pus had produced nothing: the gonorrhœal pus was again inoculated on the left thigh, and the pus of the chancre on the right; injections of acetate of lead were ordered; the chancre, which still remained, was cauterized: those on the corona glandis were healed.

The 12th. The chancre was fully cicatrized; the gonorrhœal pus was again inoculated on the right thigh; the inoculations of the 10th having produced nothing.

The 13th. The puncture from the last inoculation was red and inflamed; there was little discharge; the patient experienced no pain on passing his water; the injections were continued, with copaiva in form of bolus.

The 18th. The false pustule, caused by the inoculation on the 12th, had dried up and disappeared; the gonorrhœa was nearly cured.

The 24th. The patient left quite cured.

CASE XXXIII. *Chancre of the prepuce at the period of reparation, gonorrhœa, sympathetic bubo; inoculation with negative result in each case.*

Fourn——, aged 20, entered Nov. 21, 1835, had contracted a gonorrhœa and chancre of the prepuce, about three months previous; he had received no treatment. A fortnight since, a bubo had developed itself in the right groin; its course had been acute; the gonorrhœa had caused some pain on passing his water. Upon separating the lips of the meatus urinarius, some points of the mucous membrane were found eroded, similar to those which are found in balanitis; the chancre of the prepuce presented all the characters of the period of reparation; its surface was covered with fleshy granulations; the bubo had suppurated; no more engorgement remained at its base, than at that of the chancre; it was opened and much creamy whitish pus was discharged.

The 23rd. The pus of the gonorrhœa was inoculated on the left thigh, that of the bubo on the right, and that of the chancre in the

period of reparation by punctures made on the right thigh below that from the bubo. For the gonorrhœa, injections of sulph. zinc. were ordered; the chancre was cauterized and dressed with calomel and opium cerate, and cataplasms were placed on the bubo.

The 28th. None of the inoculations had produced a result; the pus of the gonorrhœa was again inoculated on the left thigh; the same treatment was continued.

Dec. 6th. The inoculation made Nov. 28th had produced nothing; the discharge from the gonorrhœa was less; the chancre was almost cured; the bubo, the aperture of which was not at all ulcerated, was healing; some resolute frictions had been made with ung. mer.

The 18th. The chancre was healed; the almost entirely closed bubo no longer furnished pus; some granulations at its aperture were cauterized with nitrate of silver; the gonorrhœa only furnished a white mucous fluid. The injections and copaiva were continued. Being completely cured, he left the hospital on the 30th.

CASE XXXIV. *Chancres at the period of reparation; inoculation without result.*

Franç—, aged 20, entered August 1, 1836. This patient had seven weeks previous, contracted chancres at the base of the glans, which inoculated themselves by contiguity of tissue on all its circumference and on the corresponding part of the prepuce; some points had passed to the period of reparation, and vegetations had developed themselves. On the scrotum, an ulceration formed itself, which increased by degrees; no particular treatment had been used.

There remained, at the time of his entrance, upon the corona glandis only some vegetations, with ulcerated points in their interstices; in the meatus urinarius a chancre was perceived, with all the characters of the period of reparation. On the anterior and superior parts of the scrotum, an inch below the penis, an ulcer was seated with irregular reverted and jagged edges, and vermillion ground; the whole thickness of the skin was perforated; the general form of the ulcer was irregular funnelshaped; all parts seemed at the period of reparation.

The 3rd. The pus collected from the surface of the ulcer of the scrotum was inoculated by two punctures, on the right thigh. Dressings of aromatic wine were applied to the interstitial ulcerations of the vegetations, as well as to the chancre of the meatus urinarius, which was also cauterized with nitrate of silver.

The 7th. The inoculated punctures had produced nothing; the interstitial ulcers were healed, and the chancre of the meatus was almost dry; it was cauterized and dressed with vin. arom.

The 10th. The vegetations were cut; the chancre of the meatus was cicatrized; the ulcer of the scrotum was covered with the granulations of the period of reparation; the skin seemed fringed all around; the circumference had diminished, and the ground was more raised.

On the 15th. All being healed, without any induration remaining, the patient was dismissed.

CASE XXXV. *Chancres, balanitis, symptomatic bubo, inoculated with result.*

Alex—, aged 22, entered Nov. 14, 1835. The disease had commenced five weeks previous, with chancres on the glans and internal part of the prepuce. A balanitis soon developed itself in consequence of an incomplete phimosis. He had, till then, received no treatment. Three weeks previous, a bubo had made its appearance on the left side; we found it suppurating; there was also a considerable gonorrhœal discharge.

The 17th. The day after the opening of the bubo, its pus was inoculated on the left thigh, and the pus of the balanitis, mixed with the pus of the chancres of the glans, was inoculated on the right. For the balanitis, a cauterization was made all around with nitrate of silver, and it was dressed with vin. arom.; cataplasms were applied to the bubo.

The 19th. The inoculated punctures had produced the pustule on the right and left thigh; that on the left had developed itself with more rapidity than that on the right.

The 21st. The inoculated pustules were well cauterized, in order to destroy them; the centre of the bubo was cauterized in the same manner; its edges being too much undermined to cicatrize, had been removed; dressings of vin. arom. were applied.

Dec. 1st. The chancres on the glans and prepuce were healed; the pustules from inoculation had disappeared, under the influence of the cauterization with nitrate of silver; the centre of the bubo was in the stage of reparation; the dressings with aromatic wine and the cauterizations were continued. The patient was dismissed cured on the 15th.

CASE XXXVI. *Balanitis, with superficial chancres; inoculation with positive result.*

Bonj—, aged 40, entered Aug. 23, 1836. This patient, who had a natural phimosis, perceiving a swelling of the prepuce twelve days after a suspicious connection; for three or four days he felt some itching at the end of the penis; but at the abovementioned time, after a long walk, he suddenly experienced, at the same time with the swelling, very sharp pains, and a copious discharge flowed over the margin of the prepuce. We found a slight œdema of the parts; no induration could be perceived. Upon separating the edges of the contracted aperture of the prepuce, some ulcerations were found upon the glans, which had eaten through the thickness of the mucous membrane; the matter of the discharge was greenish and bloody; the urethra did not furnish pus upon pressure, otherwise the patient had not suffered, and the pain he felt on passing his water, were stated by him to affect the glans and prepuce only at the moment when the urine passed over these excoriated parts.

The 24th. The pus which appeared at the aperture of the prepuce, was inoculated by a single puncture. The diseased surfaces were

cauterized with nitrate of silver, carried rapidly round between the glans and prepuce; injections of aromatic wine were made, and a few threads of lint were introduced to prevent the two mucous surfaces from coming in contact.

The 26th. The inoculated point had produced the pustule; the same treatment was continued; there was already a decided improvement.

The 27th. The inoculated pustule was cauterized with arg. nitr. The aperture of the prepuce permitting the introduction of a bit of dry linen, a fresh cauterization was made, and the parts again separated.

Sept. 10th. The balanitis had completely disappeared; the ulcerations of the glans and prepuce were cicatrized; no induration remained on the seat of the disease; the circumcision was made.

The 20th. The wound from the operation was almost entirely united; some fleshy granulations were cauterized, and the patient dismissed.

CASE XXXVII. *Superficial chancres, balanitis, phimosis; inoculation with positive result.*

Bor—, aged 19, entered May 3, 1836. A few days after an impure connection, this patient, who had a natural phimosis, perceived a slight swelling and felt a smarting on the glans during the emission of his urine: at length, an abundant discharge took place upon the opening of the prepuce.

We found the mucous membrane red and presenting here and there ulcerated patches, resembling superficial chancres; no pus was produced by pressure on the canal of the urethra; no induration could be felt through the swelling of the prepuce. He had for some time been treated at another hospital. The pills of hydrarg. iodid. were prescribed.

May 4th. The pus collected at the orifice of the prepuce was inoculated, by a puncture, on the right thigh; the balanitis was cauterized all around by introducing the nitrate of silver between the glans and the prepuce. Injections were made with vin. arom. to wash the surfaces, and a few threads of lint introduced upon a probe, to prevent the contact of the inflamed mucous membranes.

The 7th. The inoculated puncture had produced the characteristic pustule of the chancre; it was destroyed with nitrate of silver. For the balanitis, the cauterization and injections were continued. Nearly all the glans could be uncovered.

The 10th. The cauterized inoculated pustule had disappeared; only one or two ulcers remained upon the glans, and they presented the characters of the period of reparation; they were cauterized and dressed with aromatic wine.

The 18th. All was healed, it was remarked that the phimosis was partly caused by the length of the frenum, which extended nearly to the meatus urinarius, and thereby prevented the prepuce from being drawn back; it was therefore cut, and the small wound dressed with

opiated cerate. No induration remained on the site of the superficial chancre. The patient was dismissed, May 24th.

CASE XXXVIII. *Transformed chancres, gonorrhœa; inoculation without result.*

Cha—— Louise, aged 19, entered April 1, 1834, had been affected with the above symptoms for five weeks; the person from whom she had contracted them had a chancre only. On the internal surface and margin of the great labia, some knots showed themselves, which following the regular course of the inoculated pustules, became filled with pus, opened and presented as many chancres as there had been pustules; a vaginal gonorrhœa showed itself at the same time; during ten days it was very acute and painful, and then became chronic. Although she had used no treatment, the ulcers appeared at the period of reparation, their ground was raised, and their surface covered with a greyish albuminous secretion, not easily to be detached, secreted a serous pus. The matter of the gonorrhœa was whitish; there was no pain on passing her urine.

The 2nd. A bath was ordered and emollient lotions.

The 5th. The pus taken from an ulcer on one of the great labia was inoculated on the left thigh; cerate dressings were used.

The 7th. The inoculation had produced nothing; the pus of one of the transformed chancres, which furnished the most purulent matter, was inoculated on the left thigh below the former puncture. Injections of decoct. alb. were used.

The 8th. The inoculated punctures were red; but little elevated.

The 9th. The redness of the inoculated points had disappeared and nothing had taken. The chancres were dressed with calomel and opium cerate.

The 18th. An examination was made with the speculum; the cervix was healthy; its antero-posterior diameter was eleven lines, and the transverse diameter the same; the vaginal secretion was like that from the uterus, transparent; the ulcers of the great labia were nearly all healed. Injections were made and tamponings with decoct. alb.

The 28th. All was well, and the patient was dismissed.

In concluding the observations upon chancres, we think we ought to quote the remarks published in the thesis of M. de Lavergne.*

“Has not M. Ricord proved, by the two pathological anatomical specimens, which he presented to the academy, that urethral chancres exist; chancres which have been indicated by inoculation, and which I have found before and after death, and upon which I have been able to make the following observations.

OBS. I. “Boisseau, aged 20, entered the Hôpital du Midi, April 2, 1836. He had had four different gonorrhœas at periods which he was unable to fix precisely; they had all been quite cured. The last,

* De la non-indentité de la blenorrhagie et du chancre p. 24, 1837.

which had caused him much pain, was followed after having lasted two months without treatment, by an orchitis, for which the patient was received into the hospital; the orchitis had existed eight days when he was admitted. After some applications of leeches, the swelling of the testicle had decreased a little, M. Ricord pointed out a complication with a hydrocele in an acute stage, which he punctured successfully. The pains which had much decreased in consequence of this puncture, returned on the third day, at the same time as a new infusion of fluid into the tunica vaginalis. A fresh puncture had the same result; M. Ricord made a third puncture and a vinous injection. Notwithstanding the acute stage, all went on as if it had been in the simple stage.

“May 30th. The patient was cured of his orchitis and hydrocele; but the gonorrhœal discharge, which upon being inoculated at first produced the characteristic pustule, had remained notwithstanding the employment of balsams and revulsives. In this state, the patient left the hospital to resume his employment; he soon returned with an orchitis complicated with hydrocele, as in the affection of the first testicle. The hydrocele was then punctured with a bistoury; but the gonorrhœal discharge had progressively increased; the bowels became confined; manna in whey was prescribed; at length a progressive marasmus, which nothing could arrest, terminated his life.

“*Autopsy.* The genito-urinary organs having been removed, and the urethra, as well as the bladder, being laid open from the superior part, ulcerations were perceived, which had destroyed the prostate gland, and the corresponding part of the urethra in its entire thickness. In the forepart, a flap of the mucous membrane of the urethra, detached from the subjacent parts, and only adhering by the anterior portion, was slightly hypertrophied; posterior to this, there was another flap which was hypertrophied and indurated; several rounded ulcerations, with the characteristic form of syphilitic ulcers, perforating the whole thickness of its mucous membrane, appeared on the surface of the bladder. The vesica seminalis of the left side, presented an extensive abscess and some ulcerations; that of the right side was uninjured; but the canalis ejaculatorius and vas deferens of the left side established a continuity of disease from the urethra to the suppurated epididymis, which presented in its interior an abscess which had almost ready penetrated a part of the testicle; in the same organ, the palliative puncture, which had been made, had sufficed to produce pseudomembranes, forming a band of union between the two surfaces of the tunica vaginalis. In the right testicle, which had been subjected to the vinous injection, the adherence was complete during life, as well as after death, and no indication, unless it be inoculation, could have led us to the knowledge of the lesion we have just described. *It ought to be observed, that the patient had never had a catheter passed or used injections.*

OBS. II. “Jean Bourdon, aged 17, entered the Hôpital du Midi, towards the end of September, 1836. He had contracted a chancre of the glans six months previous, for which he at first had no treat-

ment; soon he perceived a slight discharge from the meatus urinarius, which increased although slowly. After some very fatiguing work, he was attacked with a very inflammatory phimosis, for which a surgeon wished to make the inferior section, but the parts were drawn to one side and the edges of the wound became inoculated. Notwithstanding all the treatments employed, the disease could not be cured; in this state he entered the hospital.

“He was much emaciated, although the functions were regular; the glans and the flaps of the ulcerated prepuce were so blended as to offer the appearance of a penis with three heads. The chancre possessed all the characters of the period of increase; and notwithstanding the various local applications and attention to diet calculated to favor the internal treatment, very little amelioration could be obtained. The gonorrhœal discharge was frequently bloody, and accompanied with pain; upon inoculation it produced the characteristic pustule, which was then destroyed. Thus after many months suffering, without any instrument *ever* having been introduced into the depth of the urethra, an incontinentia urinæ supervened, which led M. Ricord to refer it to ulcerations in the neck of the bladder and canal of the urethra; the incontinentia urinæ did not cease till the death of the patient, which took place December 20, 1836, and which was accelerated by a diarrhœa which nothing could control. Although upon the post-mortem examination, the intestinal canal presented no more alteration than the other abdominal organs, which were in their normal state, except the bladder. In the chest there were some adhesions of old standing; on the right side there were some small cysts of matter, most probably from tubercles.

“The genito-urinary organs being separated, and the bladder and the canal of the urethra laid open, its sides were several lines in thickness; hard and callous; its capacity was diminished one half; the fundus presented many fleshy granulations. Besides the chancre at the meatus urinarius, there was an ulceration of the pars spongiosa urethræ, an inch in depth and eight lines in length, perforating the entire thickness of the mucous membrane; but behind the region of the bulb in the pars membranosa and prostatica, the neck and cavity of the bladder, traces of a vast phagedænic chancre were perceived. And especially on the lateral parts of the prostate, two large excavations in its substance were found separated from each other by a hypertrophied and indurated tongue, at the inferior part, the reversed prepuce showed traces of the operation and inoculated edges.

“On the corona glandis, a large chancre was seen; on the lateral parts, the two wounds from the operation which had become chancreous; and lastly, a chancre of the meatus and corpus spongiosum.

Obs. III. “— Florence, aged 19, entered the Hôpital du Midi, January 17, 1836. She had previously twice had a gonorrhœa, which yielded to injections of decoct. alb. Upon her entry, she had a vaginitis of a fortnight's standing; she had only felt acute pains on passing her water at the eight day of her vaginitis, and this determined

her to enter the hospital. The pus from the vagina, in which the speculum showed nothing, being inoculated, had a negative result; that from the urethra, produced the characteristic pustule of the chancre. M. Ricord then declared the existence of an urethral chancre, whose existence was soon demonstrated by its apparition at the meatus urinaris. A month's treatment sufficed to cure it completely."

SECTION II.

INOCULATION OF THE MUCO-PUS OF GONORRHŒA, SIMPLE AND COMPLICATED, AND IN ITS VARIOUS SEATS.

CASE I. *Acute urethral gonorrhœa; inoculation without result.*

Cal——, aged 46, entered June 27, 1835. The disease appeared three days after a connection and had existed five, accompanied with very acute symptoms; the matter of the discharge was greenish, streaked with blood. Twenty leeches were applied to the perinæum; a purgative enema was ordered, as the bowels had not been relieved for four days, and two camphor pills per diem.

The 29th. There was a little less pain; no induration was perceived in the course of the canal; the gonorrhœal pus was inoculated with two punctures on the left thigh.

July 3rd. There was some little irritation in the inoculated punctures; the skin was red and raised, but there was no pustule.

The 4th. The red spot produced by the inoculations faded without developing the pustule; the gonorrhœa no longer caused pain during the emission of the urine. Cubebs and injections of sulphate of zinc were prescribed.

The 6th. The gonorrhœal pus was inoculated on the right thigh, with two punctures; the matter of the discharge was whitish.

The 10th. The same elevated spot was observed, as was produced by the inoculation on 27th, and it disappeared in the same manner, without producing a pustule.

The 11th. A fresh inoculation was made by two punctures on the left thigh; the discharge was less in quantity, and contained less pus. The cubebs and injections were continued.

The 14th. The inoculations made on the 11th, had produced nothing, not even the inflamed spot; the gonorrhœa yielded only a mucous discharge. The patient left cured on the 22nd; the discharge had quite ceased since the 17th.

CASE II. *Urethral gonorrhœa; inoculation without result.*

Mar——, aged 22, entered April 13, 1836. The disease had lasted a month; at first very acute, it soon became chronic from using baths without any other treatment. On his entry, we found the matter of the gonorrhœa whitish; no induration was perceptible in the course of the urethra, there was neither pain in the emission of the urine nor during erection; the inoculation was made by two punctures on the right thigh. The cubebs and iron were given.

The 18th. The inoculations had produced nothing. The treatment was continued.

The 21st. The purulent matter of the discharge had much diminished.

May 1st. Little more than a mucous secretion remained.

The 10th. No more discharge remained; only in the morning, a single drop of transparent fluid was perceived at the meatus urinarius.

The 16th. The patient was dismissed cured.

CASE III. *Urethral gonorrhœa; inoculation without result.*

Bous—, aged 28, entered April 15, 1836. The affection, which was of eight days standing, had made its appearance four days after a connection; he had much pain in passing his urine, with tension of the canal, but no indurated point in its extent. Upon separating the lips of the meatus urinarius, the mucous membrane appeared red and the discharge was thin and bloody; the gonorrhœal pus was inoculated by two punctures on the right thigh. Five-and-twenty leeches were applied to the perinæum and pil. opii. c. camph. were ordered with cubebs and iron.

The 18th. The inoculations had produced nothing; the discharge appeared modified; the same treatment was continued. The gonorrhœal pus was inoculated by two punctures on the left thigh.

The 28th. The inoculation had produced no result; the discharge was losing gradually although slowly its reddish tint; the dose of cubebs was increased, and injections of sulphate of zinc were used instead of those of acetate of lead.

The 30th. The discharge was whitish and without pain. The same treatment being continued, only a slightly increased mucous secretion remained on the 6th of May, and on the 16th, the patient was dismissed cured.

CASE IV. *Acute urethral gonorrhœa; inoculation without result.*

R—, aged 18, entered May 13, 1836. The disease was fifteen days from its commencement; it had appeared eight days after an impure connection; the pain in the emission of the urine was very acute; the matter of the discharge was greenish, with many streaks of blood; the urethral canal was not indurated, but very tense.

May 14th. The gonorrhœal pus was inoculated on the right thigh, by two punctures. Five-and-twenty leeches were applied to the perinæum; the bowels not having been moved for four days, the patient was ordered a bottle of sedlitz water.

The 17th. The inoculated punctures had produced nothing; the pain on passing his urine was less; but the discharge was still very copious. Injections of nitrate of silver were ordered.

The 21st. The matter of the discharge was no longer streaked with blood, its color was whitish; and there was a tendency towards the mucous state. Cubebs, four drachms per diem were ordered, and the injections of argt. nitr. continued.

The 23rd. Only a super-secretion of mucous remained; the same treatment was pursued, and on the 7th of June, the patient left cured.

CASE V. *Urethral gonorrhœa; inoculation without result.*

Mau—, aged 28, entered April 23, 1836. The disease, which was at the eleventh day of its duration, appeared eight days after a connection. There was at the commencement no pain, and the discharge almost immediately became whitish, with the characters of a gonorrhœa. An induration was perceived on the prepuce, marking the seat of a chancre, cured a month previous.

The 27th. The gonorrhœal pus was inoculated on the right thigh. Injections of nitrate of silver and copaiva in emulsion were ordered.

The 30th. The inoculation had produced nothing; the discharge was diminished.

May 1st. The canal was cauterized with the caustic holder.

The 2nd. The discharge was augmented; it was purulent and streaked with blood.

The 4th. The gonorrhœa had almost disappeared, and only a little mucous discharge remained.

The patient was dismissed cured on the 11th.

CASE VI. *Acute urethral gonorrhœal inoculation without result.*

V—, aged 28, entered May 30th, 1835. The disease, which appeared eight days after an impure connection, had lasted ten days, and presented all the symptoms of the greatest acuteness. He had taken, by the advice of a gardener, a tisant of strawberry roots. Thirty leeches were applied to the perinæum.

June 8th. The gonorrhœal pus was inoculated on the left thigh, with two punctures.

The 10th. Injections of sulphate of zinc were ordered, as the gonorrhœa was far less painful, yet some streaks of blood were still remarked in the discharge.

The 11th. The inoculated punctures had produced nothing; the matter of the discharge was whitish yellow; but its quantity was somewhat less.

The 21st. The inoculation of the 15th, not having produced anything, a fresh inoculation was made. Cubebs were ordered, two drachms per dose.

The 30th. The last punctures were without effect; the discharge was much less.

July 6th. There remained only an increased secretion of mucus.

The 11th. The patient left cured.

CASE VII. *Urethral gonorrhœa; inoculation without result.*

Lez—, aged 26, entered May 31, 1836. A month previous, a gonorrhœa had appeared eight days after a connection. At first it was very painful, but the acute stage lasted only eight days, although the patient underwent no treatment. Upon his entry, the rather co-

pious discharge was of a yellowish white color; there was neither pain nor induration in the canal of the urethra. The gonorrhœal pus was inoculated on the left thigh, by two punctures. Injections of argent. nitr. were ordered, with an emulsion of copaiva.

June 3rd. The inoculation had not succeeded; the same treatment was continued.

The 6th. The discharge had much decreased; the mucous matter prevailed.

The 10th. The injections of nitrate of silver were suspended.

On the 12th, scarce any discharge remained; and the 20th, the patient left cured.

CASE VIII. *Acute urethral gonorrhœa; inoculation without result.*

M——, aged 18, entered April 26, 1836. The affection had commenced five days previous; the patient was suffering much; the discharge, which was very copious, was of a yellowish green color and streaked with blood; the canal of the urethra was painful when touched and very tense; but no induration was perceived in any part of its extent.

The 27th. The gonorrhœal pus was inoculated by two punctures on the right thigh; thirty leeches were placed upon the perinæum; a camphorated enema was ordered for the evening, and bleeding, if the state of the fever should require it.

The 29th. The fever still continued, and the patient was therefore bled, as had been directed on the 27th.

The 31st. There was less pain; the inflammatory stage seemed to be calmed; the inoculated punctures had produced nothing. Injections of nitrate of silver were prescribed.

May 6th. The discharge had diminished, its yellow color had disappeared; the secretion was white and rather mucous than purulent. Four table spoonsful of the emulsion of copaiva per diem were ordered.

The 11th. A little mucous discharge in the morning remained; the dose of the emulsion was increased to six spoonfuls; the injections were discontinued; and on the 24th, the patient left cured.

CASE IX. *Acute urethral gonorrhœa; inoculation without result.*

Far——, aged 24, entered Dec. 27, 1836. The affection had existed a fortnight, it made its appearance three days after a connection. At the commencement, the patient had suffered much; there was a cordee. There was tension, but no induration of the canal; the acute stage still existed; the matter of the discharge was of a yellowish green color; the mucous membrane of the urethra appeared red and tumified. The gonorrhœal pus was inoculated on the left thigh with two punctures. Thirty leeches were applied to the perinæum.

The 30th. The acute stage had nearly disappeared; four spoonfuls per diem of the emulsion of copaiva were ordered.

Jan. 10th. The discharge was diminished; the matter was whitish and mucous.

The 13th. The discharge was still copious; injections of the iodide of iron were ordered; by the 16th, all had disappeared, and the patient left cured the following day.

CASE X. *Acute urethral gonorrhœa; inoculation without result.*

Che——, aged 22, entered Sept. 13, 1836. The disease had commenced four days previously, eight days after a connection. The matter of the discharge was greenish and purulent; the patient suffered much in the emission of his urine; the gonorrhœal pus was inoculated on the right thigh with two punctures.

The 16th. The inoculated punctures had produced nothing. The canal was cauterized with the aid of Lallemand's caustic-holder, and two pil. opii c. camph. were ordered.

The 17th. There had been much discharge from the gonorrhœa since the previous day, there were some streaks of blood, but no pain.

The 18th. The discharge had much decreased, it was white, and almost wholly mucous. The emulsion of copaiva was given in doses of four table spoonfuls per diem.

The 19th. Scarce any discharge remained; the urethra was cauterized.

The 20th. The same phenomena appeared as after the former cauterization.

The 28th. Only a drop of muco-pus in the morning remained.

The 29th. The discharge had ceased, and the patient left Oct. 4th.

CASE XI. *Acute urethral gonorrhœa; inoculation without result.*

Ois——, aged 20, entered Oct. 4, 1836. The commencement of the disease was six days previous to his entry, and had showed itself four days after a suspicious intercourse. The pains upon passing his water, had been very acute; the acute stage still continued; the mucous membrane of the urethra, which was red and tumified at the meatus, did not appear ulcerated. The matter of the discharge was very copious, and of a yellowish green color; it was inoculated by two punctures made on the right thigh; twenty leeches were applied to the perinæum, and pil. opii c. camph. prescribed.

The 8th. The inoculated punctures had produced nothing; the emulsion of copaiva and injections of nitrate of silver were ordered.

The 10th. The pain on passing the water had ceased; the discharge was whitish.

The 12th. Perceptible amelioration: an enema of sulphate of magnesia was prescribed for the constipation.

The 18th. The gonorrhœa was almost cured; an emulsion of copaiva was ordered, and in a few days the patient left cured.

CASE XII. *Acute urethral gonorrhœa; inoculation without result.*

Vas——, aged 19, entered July 5, 1836. This was the fourth day of the duration of the disease, which had made its appearance four days after a suspicious intercourse; at first, the patient had felt acute pains in passing his water, and the discharge became very copious. Upon his entry, the gonorrhœa was still in the acute stage, the patient suffered much; the muco-pus was bloody and greenish, and the mucous membrane of the urethra appeared superficially excoriated; the canal was tense, but not indurated; pressure caused some pain.

July 6th. The gonorrhœal pus was inoculated by two punctures on the left thigh; the pil. opii camph. were ordered, with thirty leeches to be applied to the perinæum and an enema with two ounces of mel. mercur.

The 10th. The inoculated punctures had produced nothing; the gonorrhœa was less painful, and the discharge less decidedly marked with streaks of blood. The pills were continued, and injections of nitrate of silver ordered for the following day.

The 15th. A fresh inoculation of the gonorrhœal pus was made, in the same manner as before, on the left thigh. The matter of the discharge appeared modified in a remarkable manner; its color was whitish, slightly tinged with yellow. The pain having entirely disappeared, the pil. camph. were discontinued; the injections were continued and copaiva in bolus form with magnesia was added.

The 17th. The discharge had decreased; the inoculated punctures had produced nothing.

The 21st. Only a little mucous secretion remained; and by the 27th, the patient was cured and left the hospital.

CASE XIII. *Acute urethral gonorrhœa; inoculation without result.*

Bic——, aged 17, entered April 12, 1836. The Gonorrhœa, with which this patient was affected, made its appearance two days after a connection; the course of the disease had been very acute and painful; by rest and the use of baths, the acute stage had disappeared; copaiva had been given and the discharge had stopped; but in consequence of the fatigue of a journey undertaken just as the disease had ceased, the discharge reappeared very copious, of a whitish color and occasioning very little pain. The above named day was the third from the return of the gonorrhœa; the mucous membrane, upon the lips of the meatus being separated, appeared excoriated; the passing of the urine occasioned at this point pretty sharp smarting; the patient had chafed himself in using the syringe; the gonorrhœal pus was inoculated by two punctures on the right thigh. Injections of sulphate of alum were ordered.

The 22nd. The inoculated puncture had produced nothing; the discharge had much diminished; the redness of the meatus had disappeared. The potion de Chopart was prescribed.

The 27th. The discharge had nearly disappeared; the potion was continued. The patient left cured on the 29th.

CASE XIV. *Urethral Gonorrhœa; inoculation without result.*

Lau——, aged 26, entered Dec. 16, 1836. This disease was of three weeks' standing; in the beginning of it, there had been much pain and a cordee. No induration was to be perceived in the canal of the urethra, nor pain upon pressure; but there was a slight itching during the emission of the urine; the matter of the discharge was whitish. An indolent tumor was perceived in the left groin.

The 17th. The gonorrhœal pus was inoculated on the left thigh; injections of nitrate of silver, a fourth of a grain to the ounce of water were ordered.

The 19th. The inoculated puncture had produced nothing; the discharge was less; cubebs were ordered, four drachms per diem; the injections were continued: a fresh inoculation of the muco-pus was made on the right thigh.

The 20th. The inoculated puncture had produced nothing; the gonorrhœa only furnished a very mucous matter mixed with streaks of pus. The left thigh was inoculated.

The 24th. The last inoculated puncture had produced nothing; there was no more discharge from the gonorrhœa; the ganglionic engorgement had not progressed.

The patient left cured on the 29th.

CASE XV. *Urethral gonorrhœa; inoculation without result.*

Blan——, aged 17, entered June 20, 1835, had been three weeks affected with gonorrhœa; eight days previous, without any appreciable cause, a bubo developed itself in the left groin, and the discharge had nearly disappeared; when the canal was pressed, a few drops of clear and whitish muco-pus appeared; the patient had undergone no treatment; leeches were placed upon the bubo, which presented no point of suppuration, and had followed a sub-acute march.

The 24th. The gonorrhœal pus was inoculated on the right thigh; injections of sulphate of zinc were ordered, and mercurial frictions made upon the bubo, which was very hard.

The 28th. The inoculated punctures had produced nothing; there remained but little discharge; the bubo was somewhat resolved.

July 10th. The bubo, to which compression had been applied, had quite disappeared; there had been no more discharge for six days.

CASE XVI. *Acute urethral gonorrhœa; inoculation without result.*

Andr——, aged 26, entered Aug. 16, 1836. This patient could not exactly fix the time at which the gonorrhœa had commenced; only he remarked that eight days after the last sexual connection he had suffered much and that the discharge had greatly increased. At the time of his entry, the gonorrhœa was in the acute stage; and the discharge was bloody and thick. Twenty leeches were applied to the perinæum, and an enema with mel. inmerc. The gonorrhœal matter was inoculated by two punctures on the right thigh.

The 19th. The inoculated punctures had produced nothing; cam-

phorated pills were ordered; but little pain remained; a cauterization was made with Lallemand's caustic holder.

The 21st. Little discharge remained; injections of nitrate of silver were ordered; and the patient left cured on the 30th.

CASE XVII. Acute urethral gonorrhœa; inoculation without result.

Dan—, aged 25, entered Nov. 11, 1836, had been affected with a gonorrhœa eight days after a connection; in the commencement, it had been very painful; the canal of the urethra tense, and very painful on being touched, presented all the symptoms of a cordee; the acute stage was in its greatest intensity; the matter of the discharge was greenish and bloody; however upon separating the lips of the swollen meatus urinarius, no ulceration was perceived; neither was there any induration in the whole course of the urethra, but a general tension; there was a large indolent engorgement in the left groin; but the patient said it existed before the gonorrhœa.

The 12th. The gonorrhœal pus was inoculated on the right thigh; twenty leeches were applied to the perinæum; two pil. opii camph. were ordered with fomentations of decoct. malvæ.

The 15th. The patient suffered less; the discharge was less bloody and the erections less frequent; the engorgement in the groin remained stationary; the inoculations had produced nothing. The gonorrhœal pus was again inoculated on the left thigh; the bowels being confined, an enema of magn. sulph. was ordered; the pil. opii camph. were continued. Injections of nitrate of silver, a grain to four ounces of water, were ordered.

The 18th. The inoculated punctures of the 15th, had produced nothing; the gonorrhœa was far less abundant and without pain; the matter of the discharge was whitish. The injections were continued and four drachms of cubebs were ordered.

Dec. 14th. The patient left cured.

CASE XVIII. Urethral gonorrhœa; inoculation without result.

Ceint—, aged 24, entered July 18, 1836. This patient had been affected with a gonorrhœa eight days; it had developed itself six days after a connection; the discharge began without pain, and on the above named day the disease had quite the appearance of a gonorrhœa; upon separating the lips of the meatus urinarius, which was a little red and swollen, the mucous membrane was seen a little eroded; in the matter of the discharge there were a few streaks of blood; there was no induration in the canal; only at the depth of two inches a point was found painful to the touch.

The 19th. The urethral secretion was inoculated on the left thigh; copaiva was prescribed and injections of arg. nitr.

The 20th. The inoculated punctures had produced nothing; the discharge was much diminished; a cauterization with nitrate of silver was ordered.

The 21st. The injections and copaiva were resumed; and the patient left on the 24th.

CASE XIX. *Acute urethral gonorrhœa; inoculation without result.*

Guil—, aged 24, entered May 13, 1836. The affection had existed eight days and had been very painful in the beginning; the matter was on his entry very copious and bloody.

The 14th. The gonorrhœal pus tinged with blood was inoculated on the right thigh; twenty leeches were applied to the perinæum.

The 17th. The inoculated puncture had produced nothing; the acuteness of the gonorrhœa was much diminished; the patient had no more pain on passing his water. Injections of nitrate of silver were ordered.

The 19th. Cubebs were ordered, two drachms three times a day.

The 20th. There had been a little diarrhœa; cubebs were ordered with syrup. diacod. and the injections of nitrate of silver were continued. The cure being complete June 3rd, the patient left.

CASE XX. *Acute urethral gonorrhœa; inoculated without result.*

Kel—, aged 22, entered May 31, 1836. The affection had lasted twelve days; it made its appearance three days after a connection, and from the commencement it had occasioned very violent pains, both on passing the water and during the erections. The matter of the discharge was greenish and bloody; upon separating the lips of the meatus urinarius, some superficial erosions were perceived in the canal; leeches were placed upon the perinæum; camphor pills were ordered, and the gonorrhœal pus was inoculated on the left thigh.

June 4th. The inoculated punctures had produced nothing; injections of nitrate of silver were prescribed.

The 8th. The gonorrhœa was much decreased; the bolus of copaiva were prescribed. The patient left cured on the 22nd.

CASE XXI. *Acute urethral gonorrhœa; inoculation without result.*

Leg—, aged 18, entered may 31, 1836. Three days after a suspicious intercourse, this patient felt very acute pain upon passing his urine, and a very intense gonorrhœa showed itself. Eight days later, he presented himself at the hospital; the discharge was puriform and greenish; he suffered much, both during the emission of his urine and in the erections.

June 1st. The gonorrhœal pus was inoculated on the right thigh; five-and-twenty leeches were applied to the perinæum, and two pil. opii camph. were ordered.

The 4th. The inoculation had produced nothing; the pain was somewhat less; injections of nitrate of silver were ordered and the pills to be continued.

The 10th. The discharge was whitish and free from pain; a cauterization was made with nitrate of silver, by means of the caustic holder.

The 12th. Scarce any discharge remained, and the patient left on the 20th.

CASE XXII. *Urethral gonorrhœa with erosion; inoculated without result.*

R——, aged 22, entered Oct. 7, 1836. The affection had existed seventeen days; at its commencement it had occasioned very acute pain. The patient had had all the symptoms of the most intense gonorrhœa with cordee. The pain was still very acute; the matter of the discharge was purulent and bloody; the lips of the meatus were eroded as well as the urethra as deep as could be seen; the canal appeared to the touch as if stretched on a probe; but there was no particular point indurated. Twenty leeches were applied to the perinæum and two pil. opii. camph. were prescribed.

The 8th. The pus taken from the meatus urinarius was inoculated; injections of argent. nitr. were ordered.

The 9th. The discharge appeared a little modified; the pain was much diminished.

The 10th. The inoculation had produced nothing; the injections were continued and four drachms of cubebs were ordered.

The 18th. The gonorrhœa, which was much better and the discharge which was whitish and flowed without pain, had returned to the acute stage, in consequence of the imprudence of the patient who had drunk two glasses of wine. The injections were suspended and the pills continued.

The 19th. The acute symptoms had yielded; the whole surface of the urethra was cauterized with argent. nitr.

The 21st. The discharge was modified and much diminished; the pills were continued.

The 24th. The discharge had nearly ceased, and a fresh cauterization was made, and Nov. 11th, the patient left quite cured.

CASE XXIII. *Urethral gonorrhœa; inoculation without result.*

Fin——, aged 19, entered April 19, 1836. Eight days after a suspicious intercourse, this patient became affected with a gonorrhœa, which in the commencement was very painful. The acute stage still existed; the erections were very frequent and painful. Five-and-twenty leeches were applied to the perinæum; the bowels being confined, a bottle of the sedlitz water was ordered.

The 27th. The pain had disappeared; the erections had yielded to the pil. camph.; the discharge was not very abundant; but it contained much greenish pus, some of which was inoculated on the right thigh; injections of nitrate of silver were ordered.

The 29th. The inoculated puncture had produced no result; the discharge had become whiter.

May 10th. There was no more discharge from the gonorrhœa, and the patient left on the 24th.

CASE XXIV. *Acute urethral gonorrhœa; inoculation without result.*

Pay—, aged 21, entered July 5, 1836. Six days after a suspicious intercourse, this patient was attacked with a gonorrhœa which had caused him much pain. When he entered the hospital, on the eighth day after the appearance of the discharge, the matter was greenish, and he had much pain in the emission of his urine. Twenty leeches were applied to the perinæum and an enema of the magn. sulph. was ordered.

July 8th. The pus of the gonorrhœa was inoculated on the right thigh.

The 11th. The puncture had produced nothing; the discharge was less copious, and the pain on passing the water less acute; injections of arg. nitr. were prescribed.

The 14th. The matter of the discharge was whitish and almost serous; the injections were continued and two drachms of cubebs twice a day ordered. This treatment was continued till the 27th, when the patient left quite cured.

CASE XXV. *Acute urethral gonorrhœa; inoculation without result.*

Dub—, aged 18, entered Oct. 24, 1885. Five days after a suspicious intercourse, this patient was attacked with gonorrhœa, the discharge from which had gradually increased, and at the time of his entry had become very copious. The patient felt acute pain on passing his water; he had undergone no treatment; the discharge was greenish and bloody; no induration was to be perceived in the canal of the urethra.

Oct. 26th. The gonorrhœal pus was inoculated by two punctures on the left thigh. The bowels not having been relieved for three days, an enema with two ounces of sulphate of magnesia was prescribed with pil. camph. and fomentations with decoct. malvæ.

The 27th. The inoculated points were slightly reddened. The treatment was continued.

The 28th. The two punctures were cicatrized; the inoculation had produced no result.

Nov. 1st. The inflammation was decreased.

The 2nd. A fresh inoculation was made by two punctures on the right thigh; the discharge was still a little bloody.

The 6th. The inoculation of the 2nd not having produced any result, a fresh inoculation was made on the left thigh.

The 8th. The punctures were cicatrized. Emulsion of copaiva was prescribed with injections of nitrate of silver. On the 25th, the patient left cured.

CASE XXVI. *Urethral gonorrhœa become acute; inoculation without result.*

Lien—, aged 22, entered June 28, 1835. For six weeks this

patient had been affected with a gonorrhœa, which he appeared to have renewed several times. He had never undergone any treatment; a few days rest and a warm bath or two, had sufficed to remove the acute and bring it back to the chronic stage. At the time of his entry, the discharge was very copious, in consequence of some excesses he had committed; he had pain upon passing his water and the bowels were constipated. The gonorrhœal pus was inoculated on the left thigh; a bottle of sedlitz water, cauterization with arg. nitr. and pil. camph. were prescribed.

July 18th. The discharge had much decreased; the inoculated puncture had produced nothing; four drachms of cubebs were ordered. The patient was in a few days time dismissed; when he presented himself at the hospital eight days later, the discharge had not returned.

CASE XXVII. Balanitis, acute urethral gonorrhœa; inoculation without result.

Gui——, aged 27, entered Nov. 1, 1836, had contracted an acute gonorrhœa six weeks previous, for which he had had no treatment. Three weeks later, after fatigue, a balanitis, favored by a natural phimosis, developed itself. Upon his entry, the gonorrhœa was in the acute stage, in consequence of an inflammation which had lasted eight days; the purulent secretion was much augmented; the pains were very intense during the emission of his urine; there was no induration in the canal of the urethra; the discharge was a little tinged with blood. The balanitis appeared super-excited, some very red spots were perceived on the glans, distinguishing so many points which were deprived of the epithelium.

The 4th. The pus from the gonorrhœa was inoculated on the left thigh by two punctures; injections of aq. goulard. were ordered for the gonorrhœa.

The 12th. The inoculated punctures had produced nothing. A fresh inoculation of the gonorrhœal pus was made on the right thigh; the balanitis was cauterized with argent. nitr. by carrying the caustic around between the glans and the prepuce; some fine lint was then introduced to prevent the contact of the mucous surfaces. The urethral surface was cauterized with nitrate of silver, by means of the caustic holder.

The 18th. The balanitis had disappeared, and but little discharge remained.

The punctures inoculated on the 12th, had produced nothing; the urethral cauterization was continued; four drachms of cubebs per diem were prescribed.

The 24th. The urethral discharge no longer presented the characters of a mucous super-secretion; on the 30th, the patient left quite cured.

CASE XXVIII. *Utero-vaginal gonorrhœa, ulceration of the cervix uteri; inoculation without result.*

Sal—— Caroline, aged 28, entered June 16, 1835. For seven years this patient had been affected with a discharge which had several times relapsed into the acute stage; she had often communicated gonorrhœa, but never chancres; moreover she stated she had never perceived any such ulcers on herself. She had never had any symptoms which could be attributed to a secondary syphilitic affection. At the time of her entry, the gonorrhœal discharge was very abundant and of a greenish color; upon examining the sexual organs with the speculum, a purulent secretion was seen to proceed from the orifice of the cervix, whose posterior lip presented an ulceration in the form of a blister, and the left commissure an ulcerated fissure; the vagina was red and the mucous membrane granulated by the inflammatory tumefaction of the follicles. Some pus was taken from the ulceration of the commissure and inoculated on the right thigh by two punctures; then the pus collected from the surface of the vagina was inoculated on the left thigh in like manner.

The 19th. The inoculations had produced nothing; the discharge was whitish and indicated a tendency to return to the chronic stage.

The 24th. Upon examining with the speculum, the vagina was pale; the granulations had disappeared; the ulcer of the commissure was granulated on all its surface; the ulcerated points were cauterized and the caustic was carried rapidly over the mucous membrane from the cervix uteri to the vulva. Injections and tamponing with decoct. alb. were ordered.

The 27th. Little discharge remained; the superficial ulcer of the posterior lip of the cervix had disappeared, and the epithelium was become smooth.

The 29th. All was cured, the patient left the hospital.

CASE XXIX. *Utero-vaginal gonorrhœa, ulceration of the cervix, inoculated without result.*

Plais—— Anne, aged 39, entered July 21, 1835. The commencement of the malady was two years previous, at which time a chancre at the anterior of the vulva and a gonorrhœa made their appearance; the chancre was dressed with ung. mer. and cerat. saturn. and a cure obtained after two months treatment; three months later, a lenticular syphilide showed itself, but disappeared after a month's treatment with pills of iodid. mercur. sudorific syrup and tisane. Upon her entry she had a gonorrhœa, which without completely stopping, had frequently become again acute. Upon examination with the speculum, a copious utero-vaginal discharge was found; the cervix presented several points which were deeply eroded, and whose surface was greyish and covered with an albuminous adhering secretion. Injections and tamponing with decoct. alb. were ordered.

Aug. 5th. The discharge had decreased, but the ulcerations of the cervix were nearly in the same state. Some pus was taken from

their surface and inoculated on the right thigh; a general cauterization was then made with argent. nitr. The injections and tamponing were continued.

The 12th. The inoculation made on the 5th, had produced nothing; a fresh cauterization was made with arg. nitr.

The 20th. The discharge had nearly disappeared; most of the ulcerations of the cervix were cicatrized; those which remained on the posterior lip were rose-colored and granulated; a cauterization was made with argent. nitr.

The 25th. But little discharge remained; the injections and tamponing were continued.

The 31st. The mucous membrane of the vagina was pale and healthy; all the surface of the cervix presented a smooth and well organized epithelium. The patient left the hospital cured.

CASE XXX. Urethral gonorrhœa epididymitis; inoculation without result.

Eno—, aged 21, entered June 6, 1835. The gonorrhœa had in this case lasted a month; it made its appearance eight days after a suspicious connection; during the first part of the time, the complaint proceeded with great acuteness and occasioned violent pain, which soon disappeared, the patient having submitted to a strict diet and perfect rest; a fortnight after the appearance of a gonorrhœa, he had recourse to the treatment with armenian bolus and vin. sarzæ; at first the discharge decreased a little, but an obstinate constipation soon followed; the urine became red; at length, to use the expression of the patient, he was seized with a great heat, after which an epididymitis appeared, which induced him to come to the hospital; we then found but little discharge, which was slightly tinged with green; there was no induration in the canal, nor pain in passing his urine, nor on pressure; on the right side there was an acute epididymitis; the affection was only sympathetic; the funiculus and corpus testis were healthy, but the epididymis was four times its usual size; thirty leeches were placed upon the course of the funiculus and an opiated cataplasm applied to the scrotum. A bottle of sedlitz water was prescribed to evacuate the rectum.

The 8th. The acute symptoms of the epididymitis had somewhat abated: however, five-and-twenty leeches were applied to the course of the funiculus; frictions of half a drachm of ung. mer. were made upon the scrotum. The discharge seemed a little increased. The muco-pus from the urethra was inoculated by two punctures on the right thigh; cataplasms were applied to the scrotum.

The 12th. The inoculated punctures had produced nothing. The epididymitis had much decreased; the frictions were continued, and injections of zinc. sulph. were ordered for the gonorrhœa.

The 21st. Only an indurated knot remained on the epididymis; the treatment was continued. Little discharge remained; four drachms of cubebs were ordered.

The 27th. Compresses imbibed with decoct. alb. were applied to the scrotum. The injections were suspended and the cubebs continued. July 11th, he left cured.

CASE XXXI. *Urethral gonorrhœa, epididymis; inoculation without result.*

Mor—Edouard, aged 18, entered Oct. 10, 1835. This patient, who was affected with a gonorrhœa, the date of whose commencement he could not accurately determine on account of the numerous relapses he had had, entered the hospital to be cured of a sympathetic epididymitis, which had followed an excess at table. At the time of his entry the gonorrhœal discharge was nearly suppressed from the irritation of the epididymitis, and only in the morning a few drops of a whitish matter were perceived at the extremity of the penis; leeches were applied along the course of the cord, and cataplasms to the scrotum.

The 17th. The inflammation of the epididymis was much diminished, but the gonorrhœa had reappeared in a large quantity; injections of acetate of lead were ordered and mercurial frictions made on the testicle.

The 28th. The gonorrhœal pus was inoculated on the left thigh.

The 30th. The puncture had produced nothing; the injections were continued, and copaiva in bolus was ordered.

By Nov. the 20th, the patient was cured and left the hospital.

CASE XXXII. *Urethral gonorrhœa, sympathetic epididymis; the pus of the gonorrhœa inoculated without result.*

Resk—Nicolas, aged 21, entered May 24, 1835. This patient had been affected with a gonorrhœa for two months; it had shown itself two days after a connection, and at the commencement was very painful; the patient had been under no treatment; an epididymitis had appeared four days before his entry. We found the discharge whitish and small in quantity; it had nearly disappeared on the second day after the development of the epididymitis; the cord was healthy, thirty leeches were applied on its course; frictions with ung. mercur. and applications of cataplasms were made to the testicle.

June 8th. The epididymitis was far less intense; the gonorrhœa discharge had again become copious; some of the pus was inoculated on the right thigh, and injections of acet. plumb. with bol. copav. were prescribed.

The 12th. The inoculation of the gonorrhœal pus was without result; and the patient left cured on the 27th.

CASE XXXIII. *Urethral gonorrhœa and sympathetic epididymitis; the gonorrhœal pus inoculated without result.*

Pap—Julien, aged 18, entered May 30, 1835. The gonorrhœa had lasted six weeks; it first made its appearance eight days after a suspicious connection; about a week previous to his entry, an epididymitis appeared on the left side, in consequence of over exertion;

the patient suffered much at the commencement; he had colic, nausea and headache. Upon his entry we found the testicle little developed, the epididymis large, but with little tension; the cord was healthy. Twenty leeches were ordered to be applied along the course of the cord and cataplasms; for the gonorrhœa, injections of sulphate of zinc; but previous to any treatment, the whitish pus proceeding from the urethra was inoculated on the right thigh.

June 8th. The puncture had produced nothing; a fresh inoculation was made on the left thigh. Half a drachm of ung. mercur was rubbed in on the testicle.

On the 9th, there was a great improvement; the copaiva bolus was prescribed.

The 10th. The inoculated punctures had produced nothing; and the patient being cured left on the 20th.

CASE XXXIV. Utero-vaginal gonorrhœa, bleeding ulceration of the cervix; inoculation without result.

Bu—— Sophie, aged 10, entered July 28, 1835. A fortnight previous, this patient perceived a copious discharge and smarting of the vulva. Upon her entry, the examination with the speculum showed the existence of a purulent uterine catarrh; the vagina presented here and there some red seemingly excoriated spots; on the anterior and internal surface of the posterior lip of the cervix, a bleeding ulceration was discovered. The pus collected on its surface was inoculated on the right thigh.

The 30th. The inoculation had not taken; the ulceration of the cervix was cauterized with arg. nitr. and injections and tamponing with decoct. alb. ordered.

Aug. 6th. The discharge was much diminished. A fresh cauterization and the same treatment as before were ordered.

On the 26th, the patient left cured.

CASE XXXV. Urethral gonorrhœa, indurated bubo; inoculation without result.

Jac——, aged 18, entered May 10, 1836. This patient had had a gonorrhœa for two months, nearly all the time it had an indolent character. A fortnight previous to her entry, a bubo had developed itself on the right side; its progress had been slow, there was no pain upon pressure; its volume was small and appeared for some days to have remained stationary. We found a copious discharge of whitish, mostly muco-pus.

May 12th. The gonorrhœal pus was inoculated with two punctures on the right thigh; compression and compresses dipt in decoct. alb. were applied to the bubo; for the gonorrhœa, the cubebæ and iron in doses of four drachms per diem were given.

The 16th. The inoculated punctures had produced nothing. The bubo seemed to vanish; the gonorrhœal discharge had decreased.

The 18th. The bubo and discharge had nearly disappeared.

On the 24th, the patient left quite cured.

CASE XXXVI. *Urethral gonorrhœa, sympathetic bubo; inoculation without result.*

Br——, aged 32, entered July 11, 1835. This patient had for three months been afflicted with a gonorrhœa, which was very painful in the commencement; he had received no treatment up to the time of his entry; six weeks previous, a bubo had developed itself in the left groin; its progress had been subacute, but it was suppurating. The gonorrhœa had caused a copious whitish discharge; there was neither pain nor induration in the course of the canal of the urethra. The edges of the bubo appeared much undermined at the base; there appeared to be an indurated engorgement, embracing some of the profound ganglions.

The 12th. The bubo was opened, and cataplasms applied to it.

The 18th. The pus of the bubo was inoculated by two punctures made on the left thigh, and the same upon the right. To promote their solution, frictions of ung. mercur. were ordered to be made upon the bubo. The gonorrhœa was treated with injections of zinc. sulph.

The 19th. None of the inoculated punctures had taken; the gonorrhœa remained little decreased.

The 21st. There was much pus from the bubo; but its base was a little diminished; the treatment was continued. For the gonorrhœa, two drachms of the copaiva bolus per diem were added to the injections.

The 30th. There remained but little induration around the bubo, which had nearly disappeared as well as the gonorrhœal discharge. The treatment was continued.

Aug. 4th. The bubo had disappeared; the applications of ung. mercur. were discontinued and replaced with decoct. alb.

On the 10th, the patient was dismissed.

CASE XXXVII. *Urethral gonorrhœa; lymphitis and sympathetic bubo; inoculation without result.*

Nob——, aged 20, entered Jan. 3, 1836. This patient had a gonorrhœa of three weeks duration; at no period had it occasioned any pain. Ten days previous to his entry, a lymphatic on the dorsum penis was irritated, and its course was marked by a red line, running towards the groin, at the same time a bubo developed itself. Till the above day, no treatment had been had recourse to; the gonorrhœal discharge was copious, and the matter of a greenish white color. The red line from the lymphatic had nearly disappeared, but the vessel appeared indurated to the touch. The but slightly developed ganglionic engorgement was very indolent and made no progress.

The 4th. The gonorrhœal pus was inoculated on the right thigh.

The 8th. The inoculation was without effect, a fresh one was made.

The 18th. The inoculation made on the 8th, had produced nothing. Cataplasms were applied to the bubo, as the patient had felt some pain.

The 23rd. Injections of iodide of iron were ordered; half a drachm to eight ounces of water.

Feb. 10th. The discharge was somewhat less; the dose of the iodide of iron was increased to a drachm to the same quantity of water.

The 13th. The discharge still remained; the matter was still mucopurulent. The iodide was increased to two drachms.

The 17th. Only a mucous discharge remained; the patient felt no pain in the canal. The iodide was increased to three drachms to the eight ounces of water.

March 3rd. The patient was dismissed cured.

CASE XXXVIII. Urethral gonorrhœa, sympathetic bubo; inoculation of the gonorrhœa without result.

Mel—, aged 20, entered August 30, 1836. The gonorrhœal affection had lasted eighteen months; the patient had undergone no treatment; three weeks previous to his entry, eight days after a connection and excesses at table, a bubo developed itself on the right side; its progress was indolent. Blisters were ordered to be applied to the bubo, and dressings of sublimate, twenty grains to the ounce of water.

Sept. 10th. The pus of the gonorrhœa was inoculated on the left thigh.

The 16th. The puncture made on the 10th, had produced nothing; the bubo had much decreased under the influence of the blisters and dressings of sublimate. Injections of iodide of iron were ordered for the gonorrhœa.

The 22nd. The discharge had ceased; the bubo had nearly disappeared, and on the 27th, the patient was dismissed cured.

CASE XXXIX. Urethral gonorrhœa, sympathetic bubo; inoculation without result.

Des—, aged 32, entered Nov. 1, 1836. This patient had been affected with a gonorrhœa two months previous, which had soon yielded to antiphlogistic treatment. Six weeks before his entry, after some very fatiguing work, a bubo developed itself in the left groin; its progress was subacute, and it opened spontaneously some time previous to his entry into the hospital, at which time he found the gonorrhœa completely cured; there was some fluctuation at the base of the bubo, and the skin which covered it was undermined at several points and of a livid red color; there were two or three openings having an appearance of fistulous passages.

The 2nd. The pus collected at a point, which seemed in the ulcerative stage, was inoculated on the right thigh; the canals were divided and some flaps of skin taken away.

The 4th. The inoculated puncture had produced nothing; the bubo was cauterized and dressed with aromatic wine.

The 8th. Cataplasms and ung. mercur. were applied to the bubo.

By the 18th, the patient was cured and left the hospital.

CASE XL. *Urethral gonorrhœa, and sympathetic bubo; inoculation without result.*

Chauv—, aged 28, entered April 19, 1836. The gonorrhœa had lasted nearly two months, and the bubo a fortnight. We found a copious whitish discharge; the patient felt no pain on passing his water; the pus from the urethra was inoculated.

The 21st. The inoculated puncture did not take; injections of arg. nitr. were ordered, one grain to four ounces of water, and copaiva in emulsion.

May 4th. The bubo was opened, and cataplasms applied to it; the treatment for the gonorrhœa was continued.

The 7th. The puncture made with the pus from the urethra had produced nothing; the gonorrhœa had disappeared.

The patient left cured on the 17th.

CASE XLI. *Urethral gonorrhœa, followed by a ganglionic engorgement; inoculation of the gonorrhœal pus with negative result.*

Col—, aged 22, entered May 31, 1836. Eight days after a connection, this patient was affected with an acute gonorrhœa, for which he underwent no treatment. Upon his entry, we found the disease had existed two months and a half; there was no pain from the discharge, which was very copious and puriform. There was a slight ganglionic engorgement on the left side, which had not progressed in the last month.

June 3rd. The gonorrhœal pus was inoculated on the right thigh; injections of arg. nitr. and two drachms of cubebs night and morning were ordered.

The 10th. The gonorrhœa had nearly disappeared; the inoculation was without result; the injections and cubebs were continued.

July 1st. the patient left cured.

CASE XLII. *Urethral gonorrhœal, indolent buboes; inoculation of the gonorrhœal pus without result.*

Ferr—, aged 22, entered Sept. 19, 1836. The gonorrhœa had been contracted a month previous; it developed itself eight days after a connection. At first very painful, it soon became chronic; two sub-inflammatory buboes developed themselves on the right and left, and were at the time of his entry of considerable size. The patient had never had any chancres; no traces of any cicatrized ulcerations were to be seen upon the penis; the gonorrhœal discharge was very copious. Prescribed injections of acetate of lead; blisters to be applied to the buboes and dressings of solution of sublimate, twenty grains to the ounce of water.

Sept. 21. The gonorrhœal pus was inoculated upon the right thigh, before commencing the treatment.

The 24th. The punctures were cicatrized.

The 29th. The buboes were much decreased; a fourth blister was applied; four drachms of cubebs per diem were given and by the 12th Oct. all was well.

CASE XLIII. *Urethral gonorrhœa; inoculation without result.*

Del— Leon, aged 17, entered May 3, 1836. This patient was for the first time affected with gonorrhœa, two weeks and a half before his entry, and he had been treated for it by another surgeon. For five weeks, his treatment had consisted in copaiva in various forms; the complaint was declared cured, and the patient left the hospital. But three days afterwards, without sexual intercourse or having committed any excess, the gonorrhœa reappeared, but without pain. Prescription: injections of arg. nitr. one grain to four ounces of water. The gonorrhœal pus was inoculated on the right thigh.

The 6th. The punctures had produced nothing. Prescription: injections of nitrate of silver; cubebs in two drachm doses night and morning.

The patient was dismissed cured May 9th.

A week later, he presented himself again at the hospital, when the gonorrhœa had not returned.

CASE XLIV. *Gonorrhœa; chancre from a new infection; urethro-genital gonorrhœa; granulated ulceration of the cervix; inoculation upon the patient herself, and upon a healthy individual without effect.*

Soy— Pole, aged 23, entered June 16, 1835. This patient contracted a gonorrhœa in the beginning of Feb. After twenty days in the acute stage, the affection became chronic without any treatment; from that time the patient, who thought she had only an increased secretion of fluor albus, having again had sexual intercourse, brought back several times a state bordering on the acute stage; at length, having several times communicated a gonorrhœa, she determined to come to the hospital to be treated for some chancres which she had contracted about a week previous. We found confluent chancres at the entrance of the vulva, and a very copious discharge. By an examination with the speculum it was found, that the acute gonorrhœa was urethro-genital; the finger being introduced into the vagina, upon pressing the convexity of the urethra, pus was seen to proceed from the interior of the canal, whose surface, as seen through the meatus urinarius, appeared swollen, but not eroded; the mucous membrane of the vagina was red and granulated; the cervix, over which the pus of the uterine gonorrhœa passed, presented at the aperture, the anterior and posterior labia, deep ulcerations, having quite the appearance of chancres; their ground was covered with a pultaceous greyish membrane; at the commissure of the labia on the left, there was a superficial granulated ulceration, penetrating into the cavity of the cervix.

The 17th. A bath and emollient injections were ordered.

The 20th. The chancres of the vulva were dressed with calomel and opium cerate.

The 23rd. The speculum was applied, and the cavity of the uterus and cervix were cauterized; the nitrate of silver was applied to the ulcerations, then carried gently over the surface of the cervix and vagina; the patient felt no pain upon the application of the caustic; the vagina was tamponed with dry lint.

The 24th. The discharge had become much less since the cauterization.

The 25th. The matter of the discharge was less charged with pus; the ulceration of the cervix had nearly freed themselves of the pulpy crust which covered their surfaces. Injections of decoct. alb. had been ordered on the preceding day.

The 30th. The chancres of the vulva appeared to tend towards the period of reparation; the erosions of the cervix presented a rose-colored ground, covered with granulations; the suppuration was very active on their surface; the edges were no longer raised; pus taken from the posterior labium was inoculated by two punctures on the right thigh; a general cauterization was made with the nitrate of silver, and tamponing with dry lint.

July 7th. The discharge had much decreased; the surface of the vagina appeared healthy and no longer red nor granulated; the mucus which passed over the cervix was transparent; the ulcerations of the posterior lip were almost level with the surrounding parts; their surface was in full progress towards reparation, they still furnished much pus; the anterior lip was cauterized; only an ulceration covered with granulations remained; that of the commissure had disappeared under the action of the cauterization carried into the interior of the cervix. No more pus came from the urethra, only a super-secretion of mucous. Some pus was taken from the ulceration of the posterior lip of the cervix, and inoculated on the internal surface of the left arm of a healthy individual; then some of the same pus was inoculated on the left thigh of the patient.

The inoculation made June 30th, had produced nothing. By means of the speculum, a general cauterization was made, particularly upon the ulcerated points.

July 10th. The inoculations made upon the healthy individual had produced nothing, nor had that made upon the thigh of the patient. The discharge had nearly ceased; injections of decoct. alb. were ordered.

The 17th. An examination was made with the speculum; the ulcerations of the cervix had disappeared; the chancres of the vulva had been cured six days. The patient was discharged cured.

CASE XLV. *Chancre, bubo, vaginal gonorrhœa, with superficial erosion of the cervix; inoculation without result.*

Gentil—Marguerite, aged 19, entered May 19, 1835. The affection had lasted four months; chancres showed themselves at the orifice of the vulva at the same time as a copious gonorrhœal discharge; a fortnight later, buboes appeared on each side, their progress was acute; they were opened and then assumed the appearance of symptomatic buboes. We found the chancres and buboes in the period of reparation; the matter of the discharge was greenish and charged with pus. The speculum being applied, the cervix was seen to be eroded at several points, as in some cases of balanitis; the vagina was

red and covered with a thin purulent secretion; the mucus, proceeding from the uterus, appeared transparent. The granulated surface of the chancres was cauterized, as well as the buboes, which were also in the period of reparation; dressings of calomel and opium cerate were ordered.

The 21st. The pus collected from the surface of the vagina, was inoculated by two punctures made on the right thigh.

The 26th. The inoculated punctures had produced nothing; the same dressings were continued, with injections of decoct. alb.

The 30th. The chancres of the vulva were healed, as well as the bubo on the right. As the discharge still remained copious, injections of alum sulph. were ordered.

June 7th. The surface of the cervix and vagina was cauterized with arg. nitr.

The 10th. The discharge had nearly disappeared, and on the 14th, the patient was examined with the speculum; the cervix and the vagina were perfectly healthy.

The patient was therefore dismissed.

CASE XLVI. *Chancre, gonorrhœa, abscess of the epididymis; inoculation without result.*

Dac—— Victor, aged 20, entered June 30th, 1835. This patient, who had been affected for two months with a gonorrhœa, which showed itself six days after a connection, and a chancre of the frenum, contracted in consequence of a rupture of this part, and hitherto made some attempts at treatment, but void of regularity, and thus had received no benefit. Four days before his entry into the hospital, an epididymitis supervened. We found that the urethral discharge was without pain; the matter was whitish; on the frenum was a chancre in the period of ulceration; the cord was engorged in its whole extent, and the epididymis was very large. For the gonorrhœa, injections of sulphate of zinc and copaiva in bolus form were ordered; cataplasms were applied to the scrotum and frictions made with ung. mercur. The chancre was dressed with calomel and opium cerate. The bowels not having been relieved for three days, an enema of magnes. sulph. was administered, and to combat the inflammation of the epididymis, twenty leeches were applied to the funiculus.

The 27th. The gonorrhœal discharge had decreased; the chancre of the frenum had been cauterized with arg. nitr.; the inflammation of the epididymis was less, and a raised hardened point was perceived upon it.

July 1st. The gonorrhœa had nearly ceased; the chancre still remained; and one half of the surface was still in the period of progress; the raised point on the epididymis appeared inclined to suppurate.

The 13th. The patient had only a few drops of gonorrhœal pus in the morning; the chancre was cicatrizing; the abscess on the epididymis was open, and its pus was inoculated on the right thigh.

The 17th. The puncture made with the pus from the epididymis had produced nothing; the gonorrhœa was cured; the chancre almost

cicatrized; the abscess furnished little pus; compresses with decoct. alb. were placed on the scrotum.

Aug. 8.h. The patient left cured.

CASE XLVII. *Phimosis, balanitis with erosion; inoculation without result.*

Reed—, aged 21, entered May 9, 1836. Without being able definitely to state the commencement of the complaint, this patient stated that for about a fortnight, he had felt a smarting on the glans. He had a congenital phimosis, which allowed of the glans being partly uncovered. The prepuce had become œdematous, and the pains had greatly increased; he felt no pain upon passing his urine, which he could in any way attribute to the canal of the urethra; he only suffered from the contact of the urine with the excoriated margin of the prepuce. As far as could be ascertained, the pus which flowed from this aperture, did not proceed from the urethra. The pus taken from the eroded parts of that portion of the glans which could be uncovered, was inoculated on the right thigh; twenty-five leeches on the penis, and emollient and opiated applications were ordered.

May 11th. The puncture was red, but not vesicular; the œdema of the prepuce had much decreased; the existence of a balanitis was ascertained, with erosions of the glans in patches and stretching to its base; the internal part of the prepuce was also eroded in large spots; the whole surface was cauterized with arg. nitr. and a bit of dry linen placed between the glans and prepuce. The pain which at first was very sharp, entirely ceased in half-an-hour.

The 12th. The prepuce was no longer œdematous; the diseased surfaces were almost dried up and free from pain; the inoculated puncture was rather vesicular and pointed.

The 16th. All was healed and the patient left.

CASE XLVIII. *Balanitis with erosion, sympathetic bubo; inoculation of the pus of the balanitis and that of the bubo, with negative result.*

Laut— Antoine, aged 22, entered Nov. 21, 1836. This patient also having a natural phimosis, was unable to state the time at which the balanitis had commenced; he only said that for a month, the pains had been very violent and the prepuce had become œdematous. A fortnight previous, a bubo had appeared on the left side; its progress had been subacute and little painful. At the time of his entry, he was able to uncover the glans, which was eroded in several places, some of the erosions were deeper, and seated on the left side of the frenum.

The 23rd. The pus of the balanitis was inoculated on the right thigh; all the diseased surfaces was cauterized with arg. nitr. and a piece of dry linen placed between the glans and the prepuce.

The 26th. Only a few of the eroded points near the frenum remained; the inoculated puncture, which at first appeared to follow a regular course in its development, dried up without any result; the bubo had been treated with cataplasms.

Dec. 12th. The bubo was opened; the glans was healed. On the 14th, the pus of the bubo was inoculated on the left thigh.

The 17th. The inoculation had not succeeded; the cavity of the bubo was cauterized, and the patient left cured on the 30th.

CASE XLIX. Balanitis with erosion, gonorrhœa, bubo; inoculation without result.

Lem——, aged 34, entered Nov. 14, 1835. This patient had perceived twenty days previous, an erosion at the base of the glans; soon after a gonorrhœa followed, and then a bubo showed itself in the right groin. We found part of the surface of the eroded glans healing; the gonorrhœa, whose progress had been very acute, afforded a copious and bloody discharge; the bubo had suppurated.

The 18th. The bubo was opened and the pus inoculated on the left thigh; the pus of the vesicular ulceration, seated upon the glans, was inoculated upon the upper part of the left thigh, and that from the gonorrhœa on the lower part of the same thigh; the erosions of the glans were cauterized, and some lint dipt in decoct. alb. applied to it; cataplasms were placed on the bubo; for the gonorrhœa, the interior of the canal was cauterized with Lallemand's caustic holder.

The 21st. The inoculation had produced nothing, and the patient left cured.

CASE L. Chancre at the period of reparation, balanitis; inoculation without result.

Lerg——, aged 26, entered May 24, 1836. This patient had a natural phimosis; he was unable exactly to fix the time at which the chancres at the base of the glans and internal superior part of the prepuce made their appearance. He had perceived them about a month previously, after having with much difficulty uncovered the glans, since which time the prepuce became œdematous and a balanitis succeeded. Ten days before his entry, some spots of a lenticular syphilide showed themselves on the body and extremities; at the seat of the chancre, some induration was perceived; there was no gonorrhœa nor induration in the canal of the urethra.

May 27th. The pus of the balanitis was inoculated on the left thigh, to ascertain if the chancres of the glans and prepuce were still in the period of ulceration. The usual treatment was ordered for the balanitis.

June 3rd. The inoculation had produced nothing; the lenticular syphilide had made little progress. The pil. hydrarg. ioidid. and the sudorific syrup and tisane were ordered.

The 25th. The eruption began to fade. By July 12th, the patient was cured and dismissed.

SECTION III.

INOCULATION OF THE PUS TAKEN FROM BUBOES.

CASE I. *Chancre and symptomatic bubo; inoculation with positive result.*

Mich——, aged 18, entered Oct. 3, 1835. The patient could not tell the precise date at which the infection had taken place, but thought two months must have elapsed; twenty days previous to his entry, a bubo showed itself on the right side; on the right side also near the frenum, the chancre was situated, nearly all its surface presented marks of the period of reparation; there was no induration at its base. The progress of the bubo was slow; a little fluctuation was felt near its summit; the tumor was superficial; the fluctuating point seemed to be seated in one ganglion alone; the surrounding cellular tissue, and the inguinal glands were engorged. The chancre was cauterized and dressed with vin. arom. A blister was applied to the bubo, and dressed with ung. mercur. This dressing was continued till the 21st.

The 22nd. The bubo was opened and afforded a pretty large quantity of reddish pus. The cavity was deep and round; the pus was inoculated by a puncture made on the right thigh. The chancre of the frenum had healed.

The 24th. The inoculation made on the 22nd had succeeded, and the pustule was large and well developed; it was opened, and the pus from it inoculated on the left thigh.

The 27th. The inoculation on the 24th had succeeded, the pustule was formed; it was ruptured, and beneath it, a chancreous ulcer was seen piercing the entire thickness of the skin. Both inoculations were dressed with vin. arom. and cauterized with arg. nitr. The suppuration appeared to extend in the indurated mass which enveloped the suppurated ganglion; the swelling had decreased, but the skin was left undermined.

Nov. 1st. The inoculated points were healing; the skin which covered the bubo, was destroyed by a rapid ulceration, and the cavity laid open. Aromatic wine was applied.

The 10th. The period of reparation had commenced. The dressings were continued, and the patient left cured on the 30th.

CASE II. *Chancre, symptomatic bubo; inoculation at first without result, then producing the characteristic pustule of chancre.*

March——, aged 27, entered June 18, 1835. The chancre situated near the frenum, made its appearance five weeks previous; he was first treated with sarsaparilla. Twelve days before his entry, a bubo appeared on the left side. We found the chancre healing; the bubo had suppurated, it was opened, and the pus inoculated immediately by two punctures made on the left thigh. The pus of the chancre was inoculated on the right thigh by a single puncture.

The 19th. The inoculated punctures had produced nothing; the lips of the incision made in the bubo had become ulcerated. A fresh inoculation of the pus of the bubo was made on the left thigh. The chancre was cauterized and dressed with vin. arom.

The 24th. The punctures made on the 19th had succeeded, and the pustules were very fine; the chancre was healed; the bubo was cauterized and dressed with vin. arom.

The 26th. The lower pustule was cauterized with arg. nitr.; the bubo was a little better.

July 3rd. The pustule cauterized June 26th, was nearly destroyed; the chancre from the superior pustule, which had been allowed to take its course, was well cauterized, and then dressed with vin. arom. There was still some induration at the base of the bubo; it was dressed with calomel cerate.

The 12th. The chancre on the thigh was modified by the cauterization; its ground was rose-colored, and there was no induration at its base; it was dressed with the wine.

The 20th. The bubo was better; the ground was becoming cleaner, and the induration decreasing; the treatment was continued till Aug. 4, when the induration had disappeared; the chancre of the thigh was healed and the bubo was rapidly cicatrizing; some fleshy granulations were cauterized.

On the 8th, the patient left quite cured.

CASE III. *Chancre, symptomatic bubo; inoculation with positive result.*

Rich—, aged 36, entered Oct. 24, 1835. This patient had on the posterior part of the glans some but slightly developed chancres, most of which were in the period of reparation. He was unable to state the exact time at which the disease had commenced; but he said the suppurated bubo on the left side, had first made its appearance a fortnight previous to his entry; its progress had been acute and painful; the skin was red and adherent; there was no induration at the base of the tumor which had its seat in the superficial ganglions. On the dorsum penis, a lymphatic was to be remarked, forming a hardened line running from a considerable chancre on the left side of the glans towards the bubo on the same side.

Oct. 27th. The bubo, which contained much pus, was opened. The chancres of the glans were cauterized and dressed with calomel and opium cerate.

The 30th. The edges of the opened bubo appeared ulcerated. Pus was taken from the bottom of the cavity and inoculated on the right thigh. On the glans, only the chancre on the left side remained; the others had disappeared under the treatment with the ointment and cauterization with arg. nitr.

Nov. 1st. The two inoculated punctures, made on Oct. 27th had furnished the characteristic pustules. The inferior pustules were cauterized with argent. nitr. The chancre of the penis was healing. The

cavity of the bubo whose ground was becoming gradually raised, was cauterized.

The 8th. The second inoculated pustule, which was already covered with a thick crust, concealing the chancrous ulceration, was cauterized. Aromatic wine was applied to the bubo, which was also cauterized with arg. nitr.

The 12th. No trace of the inoculation, cauterized Nov. the 1st, remained; that which had been allowed to take its course till the 8th, had resisted the cautery; it was dressed with vin. arom. The bubo was better; its ground was raised and covered with fleshy granulations. The same treatment was continued, and the patient dismissed cured on the 27th.

CASE IV. Chancre, gonorrhœa, symptomatic bubo; inoculation with positive result.

Fay—, aged 22, entered Sept. 30, 1836. This patient had contracted a gonorrhœa two months previous to his entry. A fortnight later, he perceived a chancre on the inferior and left side of the frenum. Lastly, a fortnight after the appearance of the chancre, a bubo developed itself in the left groin; its progress had been subacute. We found the gonorrhœa but slight; yet the discharge was greenish, and he had pain on passing his water. The chancre, in one part of its surface, presented the characters of the period of reparation; there was no induration at the base. The bubo, which had attained a considerable volume, appeared to be seated in the superficial ganglions, and on its summit there was evident fluctuation, although there appeared to be but little pus. The bubo was opened, and the pus inoculated on the left thigh; the gonorrhœal pus was inoculated on the right thigh. The chancre of the frenum was cauterized and dressed with vin. arom. For the gonorrhœa, injections of arg. nitr. were ordered and cubebs.

Oct. 3rd. The inoculated punctures made on the 30th of Sept. had produced nothing, not even redness; yet the edges of the incision into bubo were ulcerated and presented a chancrous appearance. The pus of the bubo was again inoculated on the left thigh. The same treatment was continued.

The 7th. The inoculated puncture made on the 3rd, with the pus of the bubo, had produced the characteristic pustule, which was then destroyed by cauterization with arg. nitr. The gonorrhœal discharge had much decreased; the chancre was healing; the bubo was better; the engorgement at the base had disappeared; the purulent secretion was less; the cavity was cauterized.

The 12th. The chancre was nearly healed; the gonorrhœa yielded a whitish matter, and he passed his water without pain. The ground of the wound being raised, the bubo presented the appearance of an even wound; it was cauterized and dressed with vin. arom.

The 20th. The gonorrhœa had disappeared, and the chancre had been healed three days. The bubo was granulating; the treatment was continued.

The 27th. The bubo was nearly healed; it was superficially cauterized to dry up the wound.

Nov. 1st. The patient was dismissed cured; no induration remained at the base of the bubo.

CASE V. Chancre, symptomatic bubo; inoculation with positive result.

Bast——, aged 18, entered Oct. 24, 1835. Six weeks previous to his entry, eight days after a connection, a chancre was formed on the skin of the penis; its appearance had been noted from the third day; it began by a pustule which was only broken on the eighth day, as we have said above. Nearly at the same time, a bubo made its appearance on the right side, and was treated with leeches and blisters; it disappeared and left only a little slightly indurated engorgement. The chancres were healed by cauterization; but twelve days later, the bubo became inflamed, and the suppuration evident on the fourteenth day. At the time of his entry, no more induration remained on the situation of the cutaneous chancre. The bubo was extensively suppurated; it was opened on the 25th, much reddish pus flowed from it; the cavity was large; there was some engorgement at the base, to which cataplasms were applied.

The 28th. The pus of the bubo was inoculated by a single puncture, made on the right thigh; the edges of the incision made in the bubo, appeared ulcerated.

The 30th. The inoculated puncture had succeeded, and furnished the characteristic pustule.

Nov. 1st. The inoculated pustule was destroyed with arg. nitr. The cavity of the bubo was cauterized and dressed with calomel and opium cerate.

The 10th. Powdered cantharides were put into the cavity of the bubo, to obtain the reunion of the undermined skin.

The 15th. There was a decided improvement; the fleshy granulations were developed. A superficial cauterization was made.

The 18th. The cicatrization of the bubo progressed. Dressings of aq. Goulard. were used, and by the 30th, the patient was cured and dismissed.

CASE VI. Chancres, symptomatic buboes; inoculation without result the day of the opening, but furnishing the pustule by inoculation made the following day.

Car——, aged 27, entered Sept. 7, 1836. Nearly a month had elapsed, since this patient had contracted a chancre, but he only noticed its presence on the skin of the prepuce, eight days after a connection; eight days later, buboes appeared on the right and left, and were acute in their progress. We found the chancre at the period of reparation; the suppurated buboes did not appear engorged at their base, and seemed quite superficial; on the dorsum penis, a hardened line was felt, resulting from an inflamed lymphatic, which, according

to the statement of the patient, was red and swollen at the time of the commencement of the buboes, and extended to the left groin. Only a little induration or lymphatic tension remained; the bubo on the left side had opened spontaneously, three days previous to the entry of the patient. The apertures had rounded edges, and appeared ulcerated.

The 10th. The bubo on the right side was opened, and its pus inoculated on the right thigh. The chancre on the flap of the prepuce, was cauterized and dressed with vin. arom.; cataplasms were applied to the buboes, the edges of which were much undermined.

The 12th. The inoculation made on the left side, with the pus of the bubo, which had opened spontaneously, had produced the characteristic pustule. On the right thigh, the inoculation made with the pus of the bubo on the right side the day it was opened, had produced nothing. A fresh inoculation was made on the right thigh, with the pus of the bubo on the right side.

The 13th. The pustule from the first inoculation was cauterized; the second made on the 12th, had succeeded. The same dressing was continued for the chancre.

The 16th. Pulverized cantharides were placed in the cavity of the buboes, to promote the formation of granulations, and thus obtain the adhesion of the undermined edges; by Nov. 4th, the patient was quite cured and left the hospital.

CASE VII. Chancre, symptomatic bubo; inoculation with positive result.

Bip——, aged 30, entered Sept. 16, 1836. This patient could not exactly state the time at which he had contracted the chancres of the frenum; he had received no treatment; twenty days previous to his entry, a bubo had developed itself on the right side; its course had been very acute, it had suppurated, and opened spontaneously.

The 17th. The pus of the bubo was inoculated on the right thigh; the chancres of the frenum were cauterized, and dressed with vin. arom. The bubo was treated in the same manner.

The 21st. The inoculated pustule was cauterized; the chancre of the frenum had healed, and on the 23rd of Nov. the patient left cured.

CASE VIII. Chancres, symptomatic bubo; inoculation with positive result.

Boul——, aged 26, entered July 2nd, 1835. Three weeks after a connection, this patient perceived two little chancres near the frenum; and nearly at the same time, buboes were developed on the right and left sides. It appeared, according to the statement of the patient, that he only examined his penis at the time he felt the pain in the groin, when he found the ulcers, which at the time of his entry were healing, of little extent. Without having undergone any treatment, we found upon his coming to the hospital, a fortnight after the appearance of the buboes, that they were suppurated, and the skin was much undermined, especially on the right side.

The 4th. The bubo on the right side was opened; the chancres were cauterized, and dressed with vin. arom.

The 8th. The bubo on the left side was opened, an inch and half above the ligament. Poupart. on the abdomen, a tumor, painful to the touch, was found.

The 14th. The bubo which had formed on the abdomen was opened; and a slightly brownish thin pus flowed from it, similar to that of the two other buboes, whose apertures had become rounded and ulcerated; they were dressed with cataplasms.

The 18th. The pus of the abdominal bubo was inoculated on the left thigh; and the pus of the bubo of the right side, on the right thigh.

The 22nd. The inoculated punctures had produced the characteristic pustule; the pustule on the right thigh, resulting from the inoculation of the pus of the bubo of the right side, was destroyed by cauterization with argent. nitr.; the pustule on the left side, was allowed to take its course; the buboes were dressed with calomel and opium cerate.

The 26th. The pustule on the left thigh, was destroyed by the nitrate of silver; there was some induration at the base of the buboes, and also at the seat of the chancres; the cavities of the buboes had the appearance of extensive chancres in the ulcerative period; on the left, the edges were much undermined; the pus did not escape freely; the liq. Van Swieten. and the sudorific syrup and tisane were given.

Aug. 3rd. The indurated points were somewhat diminished; some part of the chancreous surfaces were healing.

The 8th. The buboes were dressed with wine and tanin. There was a decided improvement.

The 18th. The induration had nearly disappeared; the abdominal bubo was cicatrized; the bubo on the left side, presented some fistulous canals; that on the right, was cicatrizing.

The 20th. The Vienna paste was applied to the left bubo, in order to destroy the portions of undermined skin, which prevented the free discharge of the pus; dressings of wine and tanin were applied.

The 29th. The bubo on the right side was healed, and the left was in the period of reparation; its rose-colored ground was covered with fleshy granulations, which were cauterized.

The patient left the hospital cured Oct. 19th.

CASE IX. *Chancres, symptomatic buboes; inoculation producing the characteristic pustule.*

Ducel—, aged 20, entered Feb. 16, 1835. This patient had contracted chancres on the glans and prepuce a month previous; the ulcerations had been dressed with opiated mercurial ointment, and afterwards with cerat. plumb. A fortnight before his entry, buboes developed themselves on the right and left sides, with no other apparent cause than the ceasing of the ulceration and healing of the chancres; their course had been acute; the bubo on the right side, presented a little more engorgement than that of the left. We found the

chancres healed, and the two buboes suppurated; the cavity appeared large and the surrounding skin much undermined; upon both being opened, a thin brown pus flowed from them. Cataplasms were then applied.

The 18th. The pus from the buboes were inoculated, that on the right side, by two punctures made on the right thigh; that on the left, by a single puncture on the left thigh; the margin of the incisions appeared ulcerated, and the secretion of pus copious. The inoculation was made in the presence of M. Desruelles.

The 20th. The punctures had produced the characteristic pustules on both thighs.

The 22nd. The result of the inoculations were shown to M. Desruelles. One of the pustules on the right thigh, and that on the left, were allowed to take their course. The lower pustule on the right thigh, and the cavity of the buboes were cauterized with argent. nitr.; dressings of vin. arom. were ordered.

March 4th. The inoculated pustules, which had been allowed to take their course, had produced chancres; they were cauterized with arg. nitr. The pustule which had been first cauterized, had disappeared. The buboes were better.

The 11th. The chancre on the left thigh progressed, notwithstanding the cautery, but it appeared modified. It was dressed with vin. arom. and cauterized.

The 19th. The chancre on the left thigh had healed, without leaving any induration; the buboes were almost cicatrized, especially the left. The dressings were continued, and the patient left cured on the 30th.

CASE X. *Gonorrhœa, superficial chancre, symptomatic bubo; inoculation producing a positive result.*

Maig—, aged 24, entered Oct. 10, 1835. The patient had for three months been affected with a gonorrhœa, and superficial ulcerations on the prepuce and base of the glans. He had received no treatment. About a fortnight previous to his entry, a bubo appeared on the left side; its progress had been acute, and it was suppurated. The little discharge that remained, was white and mucous; the patient suffered no pain on passing his water; on the prepuce and glans, were some ulcerated spots covered with healthy granulations; the bubo was opened. Injections of plumb. acet. and two drachms of cubebs, three times a day were ordered; the ulcers were dressed with vin. arom. they were cauterized with arg. nitr. and cataplasms were applied to the bubo.

The 17th. The margin of the incision made in the bubo was ulcerated; the reddish pus taken from the depth of the cavity, was inoculated on the left thigh; the injections and the cubebs were continued for the gonorrhœa; the ulcers of the glans were nearly healed; a cauterization and dressings of vin. arom. were ordered.

The 20th. The inoculation made with the pus of the bubo, had

furnished the characteristic pustule; the gonorrhœal discharge still continued; the muco-pus was inoculated on the left thigh; only a single uncicatrized point remained on the prepuce; cauterization and dressings of vin. arom. were ordered, and the same treatment for the cavity of the bubo, which had a greyish color.

The 22nd. The inoculation made with the gonorrhœal pus, had produced nothing; the pustule from the inoculation of the bubo, was well cauterized.

The 23th. The gonorrhœa had ceased; the chancres had disappeared; the inoculated pustule had been destroyed by the cautery; the bubo was healing, it was cauterized, and dressed with vin. arom.; there was no engorgement at its base.

CASE XI. Chancre of the urethra, symptomatic bubo; inoculation producing the characteristic pustule.

Vac——, aged 41, entered Sept. 13, 1836. Three weeks had elapsed since this patient, without having any gonorrhœa or wound on the penis, observed a bubo, develop itself in the right groin. The progress of the affection, had been subacutely inflammatory, and suppuration ensued, notwithstanding an application of leeches. At the time of his entry, the bubo had suppurated and much undermined the surrounding skin; no trace of ulceration was to be perceived on the penis; there was no gonorrhœa; at the depth of two lines in the urethra, by separating the lips of the meatus urinarius, a spot of the size of a lentil was perceived, whose granulated surface indicated the seat of an ulcer in a stage of reparation.

The 16th. The bubo was opened, and the pus taken from the depth of the cavity, was inoculated on the right thigh. Cataplasms were applied.

The 19th. The inoculated puncture was red and vesicular; the cavity of the bubo was cauterized, and dressings of vin. arom. applied.

The 21st. The inoculation had succeeded; the pustule was then destroyed with arg. nitr.

Oct. 15th. All was well, the patient was dismissed.

CASE XII. Concealed chancre, symptomatic bubo, inoculated with positive result.

Marc—— Jean, aged 17, entered May 23, 1835. Five or six days after a connection, and a fortnight before his entry, this patient perceived a slight discharge; he felt no pain except at the extremity of the penis, where there was an indurated spot. Having been obliged to do some fatiguing work, the pains increased, and a bubo showed itself on the left side; its course was acute. On his entry into the hospital, there was no discharge, but the induration still remained. The bubo was opened, and its pus inoculated by two punctures, made on the right thigh.

The 23rd. The punctures had cicatrized; a fresh inoculation was made on the right thigh; the margin of the incision in the bubo, had assumed a chancrous appearance.

On the 8th of June, the inoculation had taken; the pustule was opened, and the pus inoculated on the left thigh, and the chancre from the inoculation was cauterized.

The 19th. The inoculation of the pus from the pustule on the right thigh, had produced a pustule on the left thigh; it was well cauterized. The first inoculation, which had not been entirely destroyed by the cautery, had been dressed with vin. arom.; it was nearly healed; but the bubo, which was extensively open, did not unite its undermined edges with the subjacent parts, and had all the appearance of malignant chancre; its surface was grey and pulpy, and the cavity appeared inclined to increase. It was well cauterized, and then dressed with vin. arom.

June 26th, there was a decided improvement, and by July 24th, all was well.

CASE XIII. *Chancre, symptomatic bubo, the pus from which being inoculated after having been preserved and dried in the air; the result was negative. Some of the same pus preserved fluid in an open tube, produced the characteristic pustule.*

Caill—, aged 24, entered Sept. 13, 1836. Five or six days after sexual intercourse, this patient was affected with chancres on the glans and margin of the prepuce. Eight days later, a bubo appeared on the right side; it was subacute in its progress, but yet there was much pain. We found on his entering the hospital, the tumor considerable, but no fluctuation could be perceived. Seventeen days elapsed since the appearance of the affection; the chancres had healed. A blister to be applied to the bubo, and dressings of sublimate, twenty grains to the ounce of water were ordered.

The 15th. A little fluctuation was perceived at the summit of the tumor. The same treatment was ordered, as on the 13th.

The 30th. The bubo had opened; the pus was inoculated on the right thigh.

Oct. 1st. The puncture had produced the characteristic pustule; it was destroyed by the cautery.

The 3rd. Some of the pus was put in a capsule, and allowed to dry, exposed to the atmosphere. On the following day, having been moistened with a small quantity of water, it was inoculated on the left thigh; two days later, it had produced no effect.

The 10th. Some pus was taken from the bubo, and preserved in an open tube; two days later, having remained fluid, it was inoculated on the left thigh.

The 16th. The puncture made on the 12th was red, raised and pustulous; it was allowed to take its course, that the result might be undoubted.

The 20th. The pustule had burst, and the chancre was perfectly characterized; it was cauterized, and dressed with vin. arom. Cataplasms and ung. mercur. were ordered to be applied to the bubo. In a short time, all was healed, and the patient left the hospital quite cured.

CASE XIV. *Chancre, bubo on the right and left side; that on the right, sympathetic, and being inoculated, producing no result; that on the left, symptomatic, and yielding the characteristic pustule on inoculation.*

No—, aged 18, entered Jan. 17, 1837. This patient was unable precisely to state the period at which he had contracted a chancre on the internal and superior part of the prepuce, but he thought that it was about six weeks previous to his entry; at which time, two buboes had been developed about three weeks; one on the right side, which appeared to have its seat in the deeper ganglions, and was only suppurated at the summit; the other on the left, suppurated in its whole extent, and only affecting the superficial ganglions. At the time of his entering the hospital, the chancre was cicatrized; both buboes were opened, and the pus from the right bubo, was inoculated on the right thigh, and that of the left on the left thigh. After the evacuation of the pus, the left bubo nearly disappeared; on the right, the tumor still remained large; to promote the resolution, an application of ung. mercur. was ordered for the following day. Cataplasms were applied to the left side.

The 20th. None of the inoculations had taken; but it was remarked in the right bubo, to which the ung. mercur. had not been applied, that the edges of the incision were not ulcerated; whilst that made in the left bubo had become round and appeared chancreous, a fresh inoculation was made like the former; the right bubo was dressed with ung. mercur.; the left was cauterized and dressed with vin. arom.

The 23rd. The inoculation with the pus of the right bubo, had produced nothing, that of the left, had afforded the characteristic pustule.

The 24th. The pustule from the inoculation was destroyed, by an application of *Pâte de Vienne*. The tumor on the right side, had much decreased in size.

The 27th. The wound resulting from the application of the caustic paste, was cauterized.

Feb. 6th. The left bubo was cicatrizing; the right tumor had nearly disappeared.

The 14th. The surface of the nearly healed bubo, was slightly cauterized.

The 24th. The patient left; there still remained a little induration on the seat of the chancre on the prepuce.

CASE XV. *Chancre, symptomatic bubo; inoculation on the day it was opened without effect, but producing the characteristic pustule by inoculation, the following day; a blister not inoculated by the chancre pus.*

Gued—, aged 23, entered May 6, 1836. The chancre of the frenum had existed a month, its form was regular; no treatment had been used. The bubo appeared in the right groin, a week previous to his entry; its progress had been acute, it was suppurated, and appeared seated in the superficial ganglions; there was also some fluctu-

ation in the surrounding cellular tissue. We opened the bubo, and inoculated, by two punctures on the left thigh, the pus which flowed from it in large quantities. There were some granulations on the chancre, which was cauterized with arg. nitr. and dressed with vin. arom.

The 10th. The inoculation had produced nothing; the lips of the incision had assumed a chancreous appearance; the negative result was attributed to a large quantity of phlegmonous pus, being mixed with the pus of the ganglionic chancre the day it was opened. A fresh inoculation was made on the right thigh. A blister was applied to the bubo, in order to promote the reunion of the undermined edges with the subjacent parts.

The 12th. The inoculation made on the 10th, had produced the characteristic pustule; it was destroyed by means of the arg. nitr.

The 20th. The chancre on the frenum was cured; the cauterized pustule had disappeared. It was remarked, that the blister applied to the bubo had not become inoculated, although it had been covered with chancre pus; the cavity was inclined to become obliterated.

The 28th. A decided improvement, especially since the preceding day; powdered cantharides had been introduced into the cavity. A cauterization and dressings of vin. arom. were ordered.

The 30th. The bubo was nearly closed, and yielded no more pus. Compresses imbibed with decoct. alb. were applied.

June 3rd. All was well, the chancre had left no induration.

CASE XVI. *Chancre, suppurated lymphitis, symptomatic bubo; inoculation producing the characteristic pustule.*

Lar—, aged 22, entered July 26, 1836. This patient had perceived, only nine days previous, a chancre on the frenum; the ulcer was of little extent, and appeared to have existed about twenty days, from its being in the stage of reparation, at the time of his entry. On the dorsum penis, a suppurated tumor was perceived, which appeared to have been produced by a lymphatic engorgement; the vessel was felt tense and slightly indurated from the insertion of the prepuce to the tumor, and beyond it towards the right groin, in which was an incipient bubo: this bubo was seated in the superficial ganglions, and not adherent to the surrounding parts, but painful to the touch; there was no gonorrhœa. The patient of a bilioso-sanguine temperament, enjoyed otherwise good health; the digestive functions were in perfect order. Five-and-twenty leeches were applied to the bubo; the chancre was cauterized with arg. nitr. and dressed with vin. arom.

The 29th. The tumor on the dorsum penis, was opened and yielded a thin yellowish pus, which was inoculated by a single puncture made on the right thigh. Notwithstanding the application of leeches, the bubo progressed rapidly; it had already become adherent. A blister was applied to it, which was ordered to be dressed with a solution of sublimate, twenty grains to the ounce of water.

Aug. 1st. The inoculation from the lymphatic abscess, had produc-

ed the characteristic pustule; the cavity presented all the appearances of a chancre; the edges were reversed and indurated, and the ground covered with a greyish pulpy matter. A cauterization was made with arg. nitr. and dressed with vin. arom. A fluctuating point was felt in the bubo; the pustule on the right thigh was cauterized.

The 6th. The bubo was opened, and its pus inoculated on the left thigh; the chancre on the frenum was nearly healed; that on the penis, had a rose-colored ground

The 8th. The punctures made on the 6th, had produced nothing, although the margin of the incision made in the bubo was ulcerated; a fresh inoculation was made on the right thigh.

The 12th. The inoculation made on the 8th, had produced the pustule; it was cauterized. The first pustule which had been cauterized on the 1st, had withstood the action of the cautery; it was dressed with vin. arom. The base of the bubo was indurated; the suppuration was little; there appeared but little tendency towards reparation; the applications of vin. arom. were suspended, and dressings of ung. mercur. with cataplasms were substituted.

The 18th. The chancre on the penis was a little granulated, its surface was healthy and rose-colored; the ulcer on the frenum had disappeared, without leaving any induration. There was a better suppuration from the surface of the bubo, and the induration at its base had decreased.

The 21st. The cauterization and dressings of vin. arom. were resumed for the bubo, but little induration remained; the pustules on the thighs from inoculation had increased, and undermined the skin.

The 25th. In order to obtain the reunion of the skin with the subjacent parts, from which it had been detached by the action of the chancre pus; a blister was applied to each ulcer on the thighs, and the cavity was filled with powdered cantharides; the lymphatic chancre on the penis was healing, and but a fourth part of its surface remained to be cicatrized.

Sept. 10th. The bubo was nearly healed, and the application of cantharides to the ulcers on the thigh, had produced the desired effect; the skin remained but little undermined.

The 20th. The bubo was well; no induration remained; the ulcers of the thighs were slightly cauterized, and by the 27th, all was well and the patient was dismissed.

CASE XVII. Chancre and symptomatic bubo; pus inoculated pure, and then mixed with sod. chlorin. positive result in the first case, and negative in the second.

Vill— Pierre, aged 28, entered April 23th, 1835. This patient having, twelve days previous to his entry, exposed himself to an infection, perceived the following day an excoriation which soon became a chancre; only eight days had elapsed since the infection, when the patient observed a bubo develope itself on the right side; its progress was rapid, and it occasioned much pain. Upon his entry, the suppu-

ration was evident, but not extensive, and only to be perceived at the summit of the tumor; the chancres in the ulcerative stage were situated at the base of the glans on the frenum, where the affection had commenced; they were dressed with aromatic wine, after having been cauterized; cataplasms were applied to the bubo.

The 30th. The bubo was opened, and yielded much thin and bloody pus; the chancres were dressed with calomel and opium cerate.

May 5th. The pus of the bubo was inoculated on the left thigh by a single puncture, and on the right thigh, the same pus mixed with equal parts of sod. chlor. by two punctures.

The 9th. The puncture on the left thigh, had produced the pustule; the two made on the right thigh, had produced nothing; the chancres on the penis were healed.

The 18th. The bubo and the chancre on the thigh, which had been allowed to develope itself, were dressed with vin. arom.

The 30th. The chancre on the thigh was healed, but some induration still remained at the base of the bubo; there was also a little induration around the cicatrix of the chancre; applications of liq. Van. Swieten were ordered.

June 14th. The indurations were less; the bubo had been treated with cataplasms and ung. mercur.

The 20th. The induration on the penis had disappeared; there was a slight salivation, the use of the liquor was therefore suspended; the gums were touched with acid. hydrochlor. and a gargarism with quinine ordered.

The 30th. The induration of the bubo had disappeared; and on the 11th of July, the patient left quite cured.

CASE XVIII. Chancre, symptomatic bubo; inoculation of the first pus flowing from the bubo, when opened, without result; production of the pustule from the pus, taken from the depth of the cavity.

Bes—, aged 23, entered Dec. 23, 1836. The chancre, seated on the left side of the frenum, had existed a month; the bubo, in the right groin but a fortnight; the bubo had been acute in its course; the patient had suffered much pain; the superficial ganglions appeared to be the seat of the tumor; the base was but little indurated; the chancre, which had received no treatment, was healing.

The 24th. The bubo was opened, and the first pus which escaped, inoculated on the right thigh; then that taken from the depth of the cavity was inoculated on the left thigh; the chancre was cauterized, and dressed with vin. arom.

The 27th. On the right thigh, the puncture, made with the first pus which escaped, had produced nothing, whilst the pus from the depth of the bubo had produced the characteristic pustule on the left thigh.

The 28th. The pustule from the inoculation was cauterized, in order to destroy it; the bubo had assumed a chancreous appearance, and the skin which covered it, was ulcerated; it was cauterized, and dressed with vin. arom.

Jan. 10. The chancre had healed; the bubo appeared modified.

The 18th. The bubo, it was remarked, suppurated very little; the base was indurated; the use of the vin. arom. was suspended, and ung. mercur. substituted.

The 20th. The suppuration was re-established; the base of the bubo had lost its induration, and was reduced to the level of the surrounding parts.

The 23th. The dressings of vin. arom. were resumed.

The 30th. The surface of the ulcer was cicatrizing; the upper part was already covered with a smooth and rose-colored membrane.

Feb. 6th. All was quite well, no induration remained on the seat of the chancre.

CASE XIX. *Chancre, symptomatic bubo; inoculation of the superficial pus, and that taken from the depth of the bubo on the day of opening, with positive result.*

J—, aged 24, entered Jan. 24, 1837. The affection had existed two months; the chancres were seated on the left of the frenum, and on the internal surface of the prepuce on the right side. A bubo on the left side, had existed a month; its progress had been subacute. We found the bubo, in which evident fluctuation was perceived, even at its base, had much undermined the surrounding skin. The chancres were partly healing.

Jan. 25th. The bubo was opened, and a bloody bad smelling pus escaped; the first pus which flowed out, was inoculated by a single puncture made on the left thigh, and that taken from the surface of the ground of the cavity, also by a single puncture on the right thigh; cataplasms were applied to the opened bubo; the chancre having been cauterized, was dressed with vin. arom.

The 26th. The inoculated punctures on both thighs, were red and swollen.

The 27th. The inoculation on both sides had succeeded; the pustule was well formed, but of little extent. The same treatment was continued for the chancre and bubo.

The 30th. The pustules filled with pus, presented all the characteristic signs of the chancrous pustule.

The 31st. The pustules were divided, and the skin below was found penetrated in its whole substance by the chancre, whose edges were abrupt; they were cauterized with arg. nitr.

Feb. 1st. The nitrate of silver appeared not to have sufficiently destroyed the chancres from inoculation; the Vienna paste was therefore applied to them; the bubo was cauterized with nitrate of silver, and dressed with vin. arom. The chancres on the penis were nearly healed; they were slightly touched with the caustic, to dry up the surface.

The 6th. The Vienna paste had destroyed the chancres from the inoculation, and their surface appeared disposed to cicatrize in a regular manner; dressings of vin. arom. were applied; the chancres on the prepuce and glans, were completely cicatrized, without leaving any induration.

The 10th. The points cauterized with the Vienna paste, were nearly cicatrized; the bubo was better, but as the granulations were tardy in their development, powdered cantharides were introduced into the cavity.

The 14th. The inoculated points were entirely cicatrized; the bubo had assumed all the characters of the period of cicatrization, and the extent of its surface was diminished one fourth.

The 18th. Cantharides were again applied.

The 21st. The progress of the cicatrization was rapid, a superficial cauterization and dressings of vin. arom. were ordered.

The 25th. The bubo was nearly cicatrized, without leaving any induration at the base.

March 2nd. Compresses with decoct. alb. were applied, and in a few days the patient was quite cured.

CASE XX. Chancres, symptomatic bubo; inoculation of the superficial and deeper situated pus, the day of its being opened; negative result in the former case, and positive in the latter.

Quinl—, aged 22, entered Dec. 2, 1836. Ten days after the appearance of chancres on the glans, a bubo showed itself on the left side, its progress had been acute, notwithstanding two applications of leeches. The cavity was extensive, and the skin become very thin.

The 7th. The bubo was opened, and the superficial pus was inoculated on the left thigh, and then that pressed out of the depth of the wound on the right thigh.

The 10th. The puncture made on the left thigh with the first pus which escaped, had produced nothing; but on the right, the inoculation of the pus taken from the ulcerated surface, which formed the ground of the cavity, had produced the characteristic pustule.

The 12th. The pustule from inoculation was cauterized; the chancres of the glans which had been cauterized with arg. nitr. and dressed with vin. arom. were healing; they were dressed with opiated cerate.

The 17th. The chancres on the penis were healed; the bubo was treated with cataplasms and ung. mercur.

The 26th. The bubo was ordered to be dressed with vin. arom. after being cauterized with arg. nitr.

Jan. 9th, 1837. The patient left cured.

CASE XXI. Chancre, symptomatic bubo; inoculation of the pus of the bubo the day it was opened, producing the characteristic pustule.

Bern—, aged 22, entered Nov. 22, 1836. In this case, the chancres had existed nearly two months; they showed themselves six days after a sexual intercourse; at the time of his entry, the bubo had been developed a fortnight, and up to that time, he had undergone no treatment. We found the bubo had suppurated; on the right side, and near the base of the glans, a chancre was perceived, some points of whose surface were healing.

The 23rd. The bubo was opened, and yielded much bloody pus, which having been cleared away, some pus was taken from the ground

of the cavity, and inoculated on the left thigh; at the same time, some of the chancre pus was inoculated on the right thigh. Cataplasms were applied to the bubo, and the chancres were cauterized and dressed with vin. arom.

The 26th. The puncture made with the pus of the bubo, taken from the ground of the cavity, had produced the pustule, as also that made with the pus of the chancre.

The 27th. The patient had scratched the pustule; the chancre on the glans had healed; the bubo, whose opening was ulcerated, was cauterized and dressed with vin. arom.

The 29th. The pustules from the inoculation were better; they were cauterized and dressed with vin. arom.

Dec. 16th. The patient left quite cured.

CASE XXII. Chancre, bubo and lymphitis; inoculation of the pus the day of the opening without result, but on the following day, an inoculation being made, the result was positive; and the pustule was subsequently inoculated with like result.

Mass——, aged 22, entered Dec. 2, 1836. Six weeks before his entry, this patient had contracted chancres on the glans; the form of the ulcers was round and regular; the edges and base slightly indurated. During the first days, there had been much irritation, but the inflammatory symptoms soon yielded to diet and emollient lotions; no other treatment had been used. About a week previous to his coming to the hospital, a little tumor formed near the posterior part of the penis on the right side, on a lymphatic, whose course was marked by a red line and indurated cord; nearly at the same time, a bubo appeared in the right groin. We found the lymphatic tumor had suppurated; but no fluctuation was perceptible in the bubo, whose progress however was very acute; it was seated in the superficial ganglions. Some points of the chancres were at the period of reparation.

The 6th. The lymphatic abscess was opened, and the first pus which escaped, was inoculated on the right thigh: the pus from the depth of the cavity, was not inoculated, as it was mixed with much blood. The chancres were cauterized, and vin. arom. applied. The bubo was treated with cataplasms.

The 7th. The inoculated puncture was not even red; some pus was taken from the depth of the lymphatic abscess, and inoculated by a single puncture made on the left thigh. The appearance of the open cavity, in the course of the lymphatic, was quite chancreous, it was therefore cauterized, and dressed with vin arom.

The 10th. The inoculation made on the 6th, on the right thigh, had produced nothing; that of the 7th, had yielded a well developed pustule; it was broken, and its pus was inoculated by a single puncture on the right thigh.

The 13th. The inoculation made with the pus of the pustule, had yielded a positive result; this pustule was then destroyed. The bubo had suppurated; it was opened, and the first pus which escaped, was

inoculation on the right, and the pus taken from the depth of the cavity on the left thigh, above the first puncture; the chancres on the glans were nearly healed, but their base was indurated.

The 16th. The inoculation of the superficial pus of the bubo on the right thigh, had produced nothing; that made with the pus from the depth of the cavity on the left thigh, had produced the pustule; the edges of the incision made in the bubo, had assumed a chancrous appearance. To counteract the tendency to induration, the pills of the hydr. iodid. were ordered, with the sudorific syrup and tisane.

The 20th. The chancres on the penis were healed; the suppurated lymphatic was in an unhealthy state of granulation; there was little tendency toward cicatrization, on account of the induration at the base of the ulcer. The bubo and the inoculations on the left thigh, were still in the period of increase; they were cauterized, and dressed with vin. arom.

The 30th. The ulcers had, under the influence of the iodide, assumed a better appearance; their ground was rose-colored, the suppuration was good, and the induration had decreased. The inoculations made on the left thigh, had undermined the skin; to promote the production of granulations, and aid the cicatrization, they were covered with a blister. The bubo was better; it was no longer covered with a greyish membrane; its ground was rose-colored and granulating; the ulceration of the lymphatic had diminished its extent, and its indurated base was become softened.

Jan. 10th. The induration which remained on the seat of the primary chancres of the glans had disappeared; the wound on the posterior part of the penis was closed, and very little induration remained around the cicatrix; nearly all the surface of the inguinal bubo, was in a state of healthy reparation. The chancres on the thigh were cicatrized; the base was no longer indurated.

The 27th. All was well, and the patient left the hospital. During all the time of the treatment, the patient enjoyed excellent health; the functions remained perfectly regular.

CASE XXIII. Chancre in the period of reparation; sympathetic bubo; inoculation without result.

M—, aged 22, entered June 6th. 1835. The patient had had chancres during six weeks; then ten days later, a bubo appeared in the left groin; its progress had been subacute. Upon this entry, there were ulcerations with the characters of the period of reparation on the frenum, margin of the prepuce, and the posterior part of the penis; the bubo had suppurated; its base was broad, but yet softened.

The 8th. The bubo was opened, and yielded a creamy pus, some of which was inoculated on the left thigh. At the same time, the pus from the chancres of the frenum, which had still some points in the ulcerative stage, was inoculated on the right thigh, by a single puncture. Cataplasms were applied to the bubo; the chancres were cauterized, to check the developement of some granulations, and were dressed with ceret. opii.

The 12th. The puncture had produced no effect.

The 13th. The pus of the bubo, was inoculated on the left thigh. The chancres were nearly healed; a superficial cauterization was made, to obtain a cicatrization; the base of the bubo was softened; the edges of the wound appeared ulcerated; but this seemed to depend on a want of vitality, in consequence of the thinness of the skin.

The 15th. The inoculated punctures had produced nothing; a fresh inoculation was made with the pus, taken from a point on the edges of the incision, which appeared still in the progressive stage of ulceration.

The 20th. The inoculation had produced nothing; the incision made in the bubo, the cavity of which no longer secreted pus, was cauterized.

The 25th. The patient left cured.

CASE XXIV. *Phagedænic chancre, sympathetic bubo; inoculation without result.*

Finarg—, aged 25, entered Oct. 7, 1836. This affection had lasted five weeks; in the beginning, a knot was formed on the anterior and superior portion of the penis; its progress resembled that of a pustule from inoculation; on the superior and posterior part of the glans, a chancre was formed in consequence of an erosion. The two ulcers remained nearly in the same state, without perceptible progress for about a week; but after severe exertion and frequent errors of diet, a phagedænic gangrenous state was induced by an excess of inflammation; the surface of the wounds became rapidly extended; then recourse was had to emollients and opiated cerate. The progress of the disease was soon arrested; but, and especially on the glans, there was a great loss of substance; the ulcer was regularly progressing towards cicatrization; when after some exertion, it became irritated, and on the following day, the patient felt a pain in the groin, in which a bubo, whose course was very acute, showed itself; it was treated, from the commencement, with mercurial frictions, and the chancres had been dressed with ung. mercur. At the time of his entering the hospital, ten days after the development of the bubo, the whole mass had suppurated; there was some engorgement at the base, which appeared to adhere to a considerable depth to the subjacent parts; the chancres presented all the characters of the period of reparation.

The 8th. The bubo was opened, and yielded a greenish bloody pus; some of which was inoculated by two punctures made on the right thigh. Some of this pus was also collected in a tube, the gums were already a little affected by the mercury; they were touched with acid. hydrochlor. and a gargle of alum. sulph. was ordered to be used. Cataplasms were applied to the bubo, and the chancres were slightly cauterized, and then dressed with vin. arom.

The 10th. The inoculation on the 8th, had produced nothing; a fresh inoculation was made with the pus of the bubo on the left thigh, and with that preserved in the tube on the right; the same dressings were continued,

The 12th. None of the inoculations made on the 10th, had produced anything; the chancres were rapidly progressing towards cicatrization; the bubo was nearly closed; a little deep-seated engorgement remained at its base. A fresh inoculation was made of the pus preserved in the tube, since the 8th.

The 17th. Only a small portion of the chancre of the glans remained; that on the skin of the penis was healed; the bubo was closed; compresses imbibed with decoct. alb. were applied, and compression was ordered to be made.

The 22nd. All was cicatrized, no induration remained, and on the 25th, he left the hospital.

CASE XXV. Gonorrhœa; sympathetic bubo; inoculation without result.

Ber——, aged 22, entered Sept. 21st, 1836. This patient was unable to state at what time the gonorrhœa had commenced, as he had several times, by frequent sexual intercourse, brought it back to the acute stage; a bubo had appeared in the right groin, about three weeks previous to his coming to the hospital, and its course had been sub-acute. We found the gonorrhœa in the acute stage, yielding a greenish pus; the bubo was of a considerable size, and but little suppurated; *cataplasms* were ordered to be applied to it.

The 22nd. The gonorrhœal pus was inoculated by two punctures, made on the left thigh.

The 29th. The inoculated punctures had produced nothing. The bubo was opened; its pus was white and creamy; but little engorgement remained at its base; some leeches applied to the perinæum on the 22nd, had much diminished the inflammatory state. A fresh inoculation of the gonorrhœal pus was made on the left thigh; some of the pus was preserved in a tube.

The 30th. The inoculations made on the 26th, had produced nothing; for the gonorrhœa cubebs were ordered, and injections of arg. nitr. The cavity of the bubo was much decreased; the edges of the incision made in it, were not ulcerated.

Oct. 4th. The pus preserved in a tube on Sept. 26th, was inoculated; the gonorrhœa had ceased; the bubo was closed.

The 7th. The inoculation of the pus preserved in the tube, had produced no result. No induration remained around the closed bubo; the patient left quite cured.

CASE XXVI. Chancre, balanitis, phimosis; sympathetic bubo inoculated without result.

Joig——, aged 21, entered July 31, 1835. Six weeks previous to his coming to the hospital, this patient had contracted chancres, which he observed three days after a connection; a fortnight later, after severe exertion, a balanitis and phimosis supervened, to which, after four days, was added a bubo on the right side, whose progress had been very slow. We found upon examination, a little fluctuation in

the bubo; pressure occasioned pain; the phimosis, although not much inflamed, did not allow the glans being uncovered, on which several indurated points were to be felt through the skin.

Aug. 7th. The bubo was opened, and yielded a little pus mixed with blood; an inoculation was made, by two punctures on the right thigh; the balanitis was cauterized, and cataplasms applied to the bubo.

The 12th. The inoculated punctures had produced nothing; dressings of ung. mercur. were applied to the engorgement of the gauglion in the right groin, to promote the resolution.

The 20th. The resolution progressed slowly; the edges of the incision were not ulcerated. The glans could be uncovered, and showed a chancre near the frenum, in the period of reparation; which was ordered to be dressed with vin arom.

The 30th. A decided improvement; the bubo had nearly disappeared; the chancre was healed. Compression, with applications of decoct. alb. were ordered to be made.

Sept. 11th. The patient was dismissed cured.

CASE XXVII. *Chancre; symptomatic bubo inoculated without result.*

Chaimb—, aged 23, entered May 17, 1836. This patient had chancres near the frenum, and a bubo on the right side, which had existed a fortnight; it had been acute in its course; the suppuration was complete, and no engorgement remained at its base.

The 19th. The bubo was opened, and afforded a thick ropy pus, which was inoculated on the right thigh; the chancre was cauterized.

The 21st. The result of the inoculation was negative; the edges of the incision had remained closed, and not ulcerated; the chancres were dressed with vin. arom. and cataplasms were applied to the bubo.

The 28th. The chancres were nearly well, and the cavity of the bubo, three-fourths united.

The patient left cured, June 19th.

CASE XXVIII. *Chancre, sympathetic bubo; inoculation affording a pseudo-pustule.*

Mor—, aged 22, entered Dec. 6, 1836. This patient was not able to state the time at which the chancres on the glans had appeared. About three weeks before the time of his entry, a bubo showed itself in the right groin. We found the chancres healed; the bubo was in full suppuration; the skin had become very thin. It was opened, and the first pus which flowed from it, was inoculated on the right thigh; then pus taken from the ground of the cavity, was inoculated on the left thigh, and cataplasms applied to the tumor.

The 9th. The inoculated punctures were red and pointed.

The 10th. A little pus was perceived at the summit of the punctures.

The 16th. The pustules were formed on both thighs; around them,

there was some redness and fluctuation; the epidermis was ruptured; the purulent cavity was only superficial, and had not perforated the skin, as is the case with chancre pus. Some of the pus was inoculated on the right thigh.

The 21st. The first two pustules from inoculation, which were opened on the 16th, had healed without any dressing; the inoculation of their pus, had produced no effect. The induration at the base of the bubo still remained; the skin which covered it, had been removed, as not adapted to cicatrization. Ung. mercur. was applied to promote the resolution of the engorged ganglions, which were perceived in the depth of the wound, and afterwards cataplasms.

The 30th. The bubo was better, but the induration disappeared but slowly.

Jan. 10th. The cicatrization had begun, granulations had made their appearance; the use of the ung. mercur. was suspended and a cauterization with arg. nitr. ordered.

The 15th. But little induration remained; some granulations were cauterized, and then compresses with decoct. alb. applied.

The 27th. The patient left cured.

CASE XXIX. *Superficial ulcer; sympathetic bubo inoculated without result.*

Caub——, aged 22, entered Jan. 30, 1837. A month had elapsed since this patient first perceived, after a sexual connection, a wound on the interior and superior of the prepuce; at first, there was much irritation, and toward the eighth day, a bubo appeared on the right side; a few days rest, and dressings with cerate, caused the ulceration to disappear; the bubo remained stationary and indolent. The patient then left Montpellier for Paris; during the journey, he had sexual intercourse, by which the cicatrix of the wound on the prepuce was ruptured, and the bubo suddenly increased. We found the wound on the prepuce nearly healed; but the bubo was extensively suppurated.

The 22nd. The bubo was opened; and the first pus which escaped, inoculated by two punctures, made on the right thigh, and the pus from the ground of the cavity on the left. Cataplasms were applied to the bubo.

The 23rd. The inoculation was without effect; the cavity was excited by the cauterization, and the cataplasms continued.

The 29th. Powdered cantharides were introduced into the cavity.

Feb. 1st. There was little suppuration; compresses with decoct. alb. and a methodic compression were applied.

The 14th. The patient left cured.

CASE XXX. *Chancre; deep-seated multilocular sympathetic bubo inoculated without result.*

Gip——, aged 26, entered Oct. 11, 1836. The affection had existed eight months; the chancres first appeared, eight days after a connection; no treatment had been used; the buboes had been develop-

ed two months; their course had been indolent, having attained a great volume, they became softened at the summit. The left bubo had been opened, by means of caustic potass; but some cavities adjacent to the principal cavity, had also to be opened. We found the suppuration of the right bubo had ceased, and it was nearly closed; its base was indurated, and extending into the depth. The left multilocular bubo had two principal cavities: a superior corresponding with the central line, and an inferior in the plica cruris; the right bubo was treated with blisters, and cataplasms covered with ung. mercur.; internally, the iodide of iron, twelve grains per diem, and a decoction of hops; with antiscorbutic syrup, were given.

The 12th. The pus of the left bubo was inoculated by two punctures, made on the right thigh: the first puncture was made with the pus from the central cavity; the second with that from the inferior.

The 18th. The punctures had produced nothing; the right bubo was somewhat diminished. Two fistulous passages in the left bubo were destroyed, and several granulating points were cauterized.

The 24th. The right bubo was nearly healed; the left suppurated little; but at the base, there could be perceived some deep seated induration. Compresses with decoct. alb. were applied, and compression ordered to be made.

The patient left cured Nov. 8th.

CASE XXXI. *Abrasion of the epidermis of the glans; sympathetic bubo inoculated without result.*

Men—, aged 19, entered Oct. 3, 1835. About a fortnight previous to his entry into the hospital, this patient, during a coition, chafed the skin off a small point, on the left side of the glans. In consequence of a natural phimosis, and a little inflammation of this wound, a partial balanitis supervened; a week later, a bubo developed itself in the superior part of the left thigh below the ligament. Poupart. and some engorgement was felt in the fossa iliaca. We found the bubo, which had been acute in its course, fully suppurated, but still indurated at the base; the wound on the glans still existed, it was therefore cauterized, and a piece of dry linen placed between the glans and prepuce.

The 10th. The pus of the bubo was inoculated on the left thigh; the wound and balanitis had disappeared.

The 17th. The inoculation produced nothing, it was repeated on the left thigh.

The 21st. The puncture, which at first appeared red and raised had disappeared; a fresh inoculation was made on the left thigh.

The 23rd. The last inoculation had produced nothing; the edges of the incision in the bubo, were not ulcerated, and it was healing; the major part of the cavity was reunited; dressings of decoct. alb. were ordered.

Nov. 9th. The patient left cured.

CASE XXXII. *Chancre; symptomatic bubo producing a pseudo-pustule on inoculation.*

Houz—, aged 32, entered Jan. 30, 1836. The patient said he had frequently had small chancres, which disappeared in ten or twelve days, with dressings of cerate. The last chancres had appeared three weeks since; ten days ago, a bubo showed itself on the right side; its progress had been very acute. We found the chancres healed, and the bubo suppurated; it was opened on Jan. 31st, and a greenish thick pus flowed from it.

Feb. 1st. The pus of the bubo was inoculated on the right thigh; the lips of the wound were red and irritated, but not ulcerated; cataplasms were applied.

The 6th. The inoculated punctures, which from the second day, had been red and pointed, and indurated at the base, disappeared after having yielded a little sero-purulent fluid; a fresh inoculation was made on the right thigh.

The 10th. The result from the second inoculation, was the same as the first; the bubo was cauterized and dressed with wine; the secretion of pus was very small.

The patient left cured on the 22nd.

CASE XXXIII. *Bubo having succeeded to a gonorrhœa; cutaneous abscess on the thigh; inoculation without result; pseudo-pustule.*

Mit—, aged 20, entered Oct. 5, 1836. This patient had been dismissed from the hospital, August, 1836, perfectly cured of a gonorrhœa, which had lasted eighteen months; a bubo which had been developed three weeks, was treated with blisters, and a solution of sublimate. At the time of his leaving the hospital, it had nearly disappeared; but in consequence of fatigue, and some irregularities in his diet it soon increased, and speedily suppurated. Ten days previous to his re-entry, a superficial abscess had formed in the superior part of the right thigh, a little below the lig. Poupart. The left bubo had suppurated, and opened spontaneously some days; we opened the abscess on the right thigh.

Oct. 7th. The pus of the bubo was inoculated on the left thigh, and that of the abscess on the right. Cataplasms were applied to both the bubo and the abscess.

The 12th. The two punctures were red; that on the right thigh, even furnished a little pus; that on the left was pointed, but only a little indurated.

The 14th. The puncture on the right thigh, made with the pus from the abscess, and which on the 12th, was full of pus, had opened; that on the left, made with the pus from the bubo, and which had been only red and indurated, was beginning to suppurate; it still remained pointed.

The 17th. The puncture on the right, had after breaking, dried up, and was nearly cicatrized; that on the left was full of pus. The abscess on the thigh was closed, and the bubo yielded but little suppuration.

The 20th. The last pustule had disappeared without treatment like the first, and without ever having assumed the appearance of a specific ulcer.

The bubo was closed, and no induration remained at its base; in a few days, the patient left quite cured.

CASE XXXIV. *Scrofulous bubo; inoculation without result.*

Lah——, aged 24, entered May 6, 1836. The patient, with a lymphatic temperament, and tendency to scrofula, had already had ganglionic engorgements of the neck; at the time of his entry, he had two enormous buboes which we could not attribute to a venereal infection; as he had not exposed himself to it, by sexual intercourse, for more than four months, he had had no other suspicious affection than a chancre, which had been cured twelve months previous, without having left any induration on its seat. The two tumors developed themselves slowly, and suppurated.

May 7th. The buboes on both sides were opened; a thick brown pus escaped, which was immediately inoculated; emollient cataplasms were applied, and a draught of tisane of hops, with baryt. hydrochlor. and sweetened with syrup of gentian. It may be proper to remark, that this patient had been five-and-thirty days in another hospital, in which he had been treated with pills of hydrarg. deuto-iod. without the least amelioration.

The 9th. The punctures had produced nothing; a fresh inoculation was made, by two punctures on the right thigh. Blisters were applied to the buboes, to excite them; the mixture as above, was continued.

The 15th. The inoculations made on the 9th, had produced nothing; the affection appeared not to progress; but we could not perceive any improvement; the suppuration was copious.

The 30th. There was an improvement, especially on the left side, compression was ordered to be tried.

June 10th. The bubo on the left, had nearly disappeared under the compression; the general health was decidedly improved.

The 20th. Compression was applied on the right side; the left bubo was cicatrized; very little induration remained in the deep-seated ganglions, which formed the base of the tumor.

The 30th. The resolution progressed rapidly; the use of bitters and anti-scrofulosæ was continued; the dose of baryt. hydrochlor. was gradually increased to twelve grains per diem, without the patient feeling any inconvenience.

July 12th. The two tumors had disappeared, and only a little tension on each side remained from the change the tissues, in which the affection had been seated, had undergone.

CASE XXXV. *Chancres, periadenic abscess, inoculated without result.*

Fécas——, aged 26, entered Nov. 14, 1835. This patient was

unable to state the exact time when he had contracted the chancres on the glans, on the right side of the frenum, and which we found in the period of reparation. A fortnight previous to his entry, he felt a pain in the left groin, and perceived an incipient bubo; the patient observed the most strict repose, applied cataplasms, and the tumor then appeared arrested in its development; but three days later, the cellular tissue, which was at first only indurated, appeared suppurated.

The 16th. An abscess in the groin was opened and yielded much creamy pus, which was inoculated by two punctures on the left thigh. After the evacuation of the pus, it could be perceived, that the inguinal ganglions were but very little swollen, and that the suppuration was only periadantic; the chancres were cauterized, and dressed with calomel cerate.

The 18th. The punctures had produced nothing; the tumor had nearly disappeared.

The 24th. The chancres were cured, and the cavity of the abscess, nearly obliterated. In a few days, the patient left cured.

CASE XXXVI. *Primary bubo (d'emblée); inoculation without result.*

Buis—, aged 18, entered Oct. 7, 1836. This patient had never had either chancre or gonorrhœa; three days after sexual intercourse, he perceived a small tumor in the inguinal region of the right side. From the commencement it was indolent, and developed itself slowly. At the time of his entry, its volume was considerable; it was situated in the deep-seated ganglions, and through the abdominal integuments, an engorgement was felt extending into the fossa iliaca; the same was every where adherent; at the summit, an obscure fluctuation was felt; cataplasms were applied.

The 14th. The fluctuation was evident; the bubo was opened, and the pus from the depth of the cavity, inoculated by two punctures made on the right thigh. Some pus was also preserved in a tube; the patient observed the most absolute repose; mercurial frictions were made on the tumor; the skin having assumed an erysipelatous tint.

The 16th. The inoculation had produced nothing; the redness of the skin had disappeared; the engorgement of the ganglion was rapidly disappearing; compression was applied.

The 17th. The pus of the bubo, was inoculated on the right thigh; and that preserved in the tube on the left; the cavity yielded little suppuration.

The 19th. The inoculation made on the 17th, had produced nothing; the wound made in the bubo, was not ulcerated; the rapidity of resolution, was for indolent buboes, very remarkable. No engorgement remained in the fossa iliaca.

The 21st. The compression was continued with compresses, dipt in decoct. alb.

The 27th. The patient left cured; the tumor had nearly disappeared; exercise and compression would suffice to remove the slight re-

maining engorgement. This patient was dismissed, somewhat sooner than common, on account of his lymphatic habit, which was ill suited to the diet and residence in an hospital. In the month of February, he presented himself again at the hospital, when all had disappeared; scarcely a trace of the wound made in the bubo remaining.

CASE XXXVII. *Primary bubo (Bubon d'emblée,) inoculated without result.*

Pe——, aged 17, entered April 26, 1836. This patient had for two months had no sexual intercourse, when the day after a coition, he felt a pain in the right groin, and a bubo began to be developed, though slowly. He was of a lymphatic sanguine habit; he had undergone no treatment; the tumor was of considerable volume; it was seated in the deeper ganglions, and its base was large; some engorgement could be felt through the abdominal integuments. The bubo had existed about three weeks; half the mass had suppurated; it was opened, and thick creamy pus escaped; that taken from the depth of the cavity, was inoculated by two punctures made on the right thigh; cataplasms were ordered to be applied to the bubo.

The 29th. The inoculations had produced nothing; the engorgement was less; the suppuration copious; a flap of skin, which appeared unfit for cicatrization, was removed; dressings of ung. mercur. were then applied to obtain the resolution of the ganglionic engorgement.

The 30th. The suppuration had increased; a fresh inoculation was made on the left thigh.

May 4th. The inoculation had produced nothing; the applications of ung. mercur. were discontinued; the engorgement had decreased by half, but the surface of the wound was covered with a kind of pulpy membrane. A cauterization and dressings of cerat. plumb. were ordered.

The 11th. The appearance of the wound was very satisfactory; the fleshy granulations appeared rose-colored; a superficial cauterization and compression with compresses, dipped in decoct. alb. were ordered.

The 20th. Scarce any engorgement remained; the surface of the bubo diminished by three fourths, was nearly cicatrized. In a few days' time, he left cured.

CASE XXXVIII. *Primary bubo inoculated without result.*

Mari—— Francois, aged 19, entered July 4, 1835. Two months had elapsed since this patient, after repeated excess at table, and a fortnight after a coition, observed two tumors develop themselves in the groin; the tumor on the left side was more rapid in its progress, and was opened at the Hôtel Dieu, where the affection was treated as venereal buboes, with ung. mercur. and cataplasms for three weeks. We found the left bubo nearly healed, and the right in full suppuration.

The 6th. The bubo was opened, and the pus inoculated by two punctures on the right thigh.

The 8th. The punctures had produced nothing; the lips of the incision, which were closed and sound, indicated that the pus of the bubo, whose base was free from induration, had not the primary syphilitic character; cataplasms were applied.

The 10th. No more suppuration remained; the cavity was closed; compresses with decoct. alb. were applied.

CASE XXXIX. *Primary bubo inoculated without result.*

Hemont—, aged 24, entered Sept, 7, 1836. Three days after a night spent in debauchery, during which the patient had seven coitions, a bubo showed itself on the left side; its progress was subacute; the sexual organs being examined with care, did not show a single trace of any ulceration: the canal of the urethra, was healthy; the bubo had suppurated; little engorgement remained at the base of the tumor.

The 12th. The bubo was opened, and the greenish thick pus inoculated by two punctures, made on the right thigh; the cavity was large, cataplasms were applied.

The 16th. The punctures had produced nothing, although the edges of the incision appeared ulcerated; but the little vitality of the tissues become thin from the suppuration, and which at the time of the bubo being opened were bluish, sufficed to explain this state; some pus, taken from the depth of the cavity, was inoculated by two punctures, made on the left thigh: some al. cantharid. was introduced into the bubo, to excite the production of granulations.

The 20th. The last punctures had produced nothing; the bubo was better; the oil had produced an excitement, and the cavity was somewhat diminished in extent.

The 28th. The bubo was cauterized, its ground was more raised; the same application was continued, and by Nov. 4th, the patient was cured, and dismissed.

CASE XL. *Primary bubo, inoculated without effect; some of the pus being preserved in a tube, did not inoculate, after having been kept four days.*

Th—, aged 22, entered Oct. 4, 1836. The patient assured us, he had never had any other venereal affection than a gonorrhœa, five years previous; it had lasted nearly two months and run through the usual acute and chronic stages; then being properly treated with injections and copaiva, it disappeared without leaving any symptoms; which could be referred to a syphilitic affection; the general health having remained in the best state possible. Seventeen days had elapsed since a superficial bubo developed itself on the right side; the patient had had no sexual intercourse for seven weeks previous; the base of the tumor appeared indurated, it was opened, the cavity was extensive, and appeared to have invaded the profound inter-ganglionic cellular tissue; an inoculation was made by two punctures on the right thigh.

The 8th. The punctures had produced nothing; the tumor had abated, but the skin appeared loosened. A fresh inoculation was made on the right thigh; some of the pus was preserved in a tube, open at both extremities.

The 11th. The pus preserved in the tube, was inoculated; the cavity appeared to be reuniting; the incision had remained un ulcerated.

The 19th. The puncture made with the pus in the tube, had produced nothing. Thus in every case, the inoculation had failed; the cavity had diminished; the patient having a scrofulous habit, was ordered a decoction of hops, with antiscorbutic syrup, and ferri protoiod. twelve grains per diem.

The 20th. Nearly all the cavity was closed and only a few drops of serous pus remained.

Nov. 7th. The patient left cured.

CASE XLI. Chancres, symptomatic bubo; inoculation with positive result; pustule carried to the fifth generation.

Lob——, aged 18, entered Jan. 5, 1833. Three days after a suspicious connection, this patient perceived a chancre on the internal part of the left side of the prepuce; the ulcer being neglected, increased, and in a few days, a bubo showed itself on the left side; its progress was sub-acute, and notwithstanding an application of leeches, ung. mercur. and emplastrum de Vigo, a complete suppuration followed.

The 6th. The bubo had opened during the night; the chancres of the penis appeared in the period of progression; they were cauterized, and dressed with opiated cerate.

The 21st. The attenuated skin, which covered the cavity of the bubo, had been destroyed by the ulceration; the ulcer had thus become denuded, and presented a chancreous appearance; the pus of the bubo was inoculated by two punctures, made on the right thigh: the ulcerated cavity was cauterized, and dressed with opiated cerate; the chancres of the penis were cauterized with argent. nitr. and dressed with calomel cerate.

The 24th. The pustules from inoculation had formed; they were opened, and their pus inoculated by a puncture on the left thigh.

The 27th. The inoculations made on the 24th, had produced the characteristic pustule; the first inoculation was dressed with calomel cerate.

Feb. 15th. The chancres on the penis had disappeared; the first inoculation was nearly healed, the second was in the period of progression; the bubo was going on well; its surface was granulating. Some pus was taken from the last inoculation, and inoculated on the right thigh. Some induration was perceived at the base of the chancres on the thigh, and on the body were some spots indicating the commencement of a lenticular syphilitic eruption; pills of hydrarg. ioid. and sudorific syrup, and tisane were ordered.

The 17th. The inoculation made on the 15th, had succeeded, and furnished the third generation; the bubo had healed.

The 27th. Pus taken from the chancre of the third generation, was inoculated on the left thigh.

March 1st. The fourth generation was produced; the pus from it, was inoculated on the 17th, and in three days time, the fifth was evident; the chancres were in a state of healing, according to the time of their existence.

The 30th. The syphilitic irruption had not progressed; the treatment was continued.

April 1st. Only two ulcers remained on the thighs; their ground was raised; a cauterization and dressings of calomel and sod. chlorin. were ordered.

May 17th. The patient was dismissed cured; no induration remaining; the general health had remained excellent, during all the time of the treatment.

CASE XLII. *Chancre of the cervix uteri; symptomatic bubo; inoculation producing the characteristic pustule.*

Dur—— Marie, aged 24, entered April 1st, 1834. The patient had for a month been affected with a gonorrhœa, which had occasioned no pain; at first, there had been little discharge; a fortnight later, a bubo appeared on the right side; its progress was very acute. We found the bubo completely softened; it was situated in the superficial ganglions; the matter of the discharge from the vulva was whitish; on the external part of the sexual organs, no trace of ulceration could be perceived; the bubo was opened, and much thin and bloody pus escaped.

The 2nd. The edges of the incision made in the bubo, appeared to be ulcerated; cataplasms were applied, and emollient injections prescribed.

The 10th. The wound in the bubo, had decidedly assumed a chancreous appearance; some pus was taken from the centre of the cavity, and inoculated on the right thigh; the ulcer was cauterized with arg. nitr. and dressed with calomel and opium cerate.

The 14th. The inoculation on the 10th instant had succeeded and produced a fine pustule. Injections of decoct. alb. were ordered; on the cervix were seen, two ulcers with greyish ground, and irregular abrupt edges.

The 19th. The pus taken from the centre of the ulcer on the right thigh, was inoculated on the left thigh.

The 25th. The inoculation made on the 19th, had produced the characteristic pustule; the ulcers were dressed with calomel cerate. Some pus from the cervix, taken from an ulcer with a greyish ground, was inoculated on the right thigh.

The 28th. The last inoculation had produced the pustule; the bubo was nearly healed; the ulcers of the cervix had become clean, after being cauterized with arg. nitr. on the 24th; that on the labium superius, was granulated at its ground, and appeared to be raised to the level of the neighboring parts.

May 6th. The first and second inoculations had healed, as well as the bubo; but little discharge remained.

The 15th. All was well, only a few superficial granulations remained on the posterior labium of the cervix.

The 23rd. The patient was dismissed cured.

SECTION IV.

INOCULATION OF THE PUS OF THE SECONDARY AND OF OTHER REPUTED VENEREAL SYMPTOMS.

CASE I. Gonorrhœa, chancre in the period of reparation, mucous tubercles; inoculation with negative result.

Che—— Elisabeth, aged 20, entered June 23, 1835. Four months previous to her entry, she became affected with a very intense gonorrhœa, but unaccompanied with great pain; one month later, after fresh sexual intercourse, she perceived a chancre in the vulva; no treatment had been used. We found the discharge had become chronic; the cervix uteri and mucous-membrane of the vagina, were but little reddened; but several patches of mucous tubercles were observed in the perinæum, and internal surface of the right thigh; amongst these latter, one was particularly remarked in the plica cruris, whose surface afforded a thick and copious pus; it appeared to be owing to a transformation *in situ* of a primary chancre. On the internal surface of the right nympha was an ulcer, with prominent irregular edges and greyish ground, with all the characteristic signs of a chancre, passing into the period of reparation. The pus taken from the mucous pustule on the right thigh, was inoculated about the middle of the same thigh, and the pus from the ulcer of the nympha on the left. Injections and tamponing of the vagina, with decoct. alb. were ordered. A lotion of sod. chlorin. and calomel in powder, were applied to the mucous pustules, and internally, pills of hydrarg. ioidid. with sudorific syrup and tisane administered.

July 1st. The punctures had remained without effect, and were perfectly cicatrized.

The 15th. The mucous tubercles were nearly dried up, and level with the skin.

The 21st. The ulcer on the nympha, was cicatrized, and on the 14th of August, the patient left quite cured.

*CASE II. Gonorrhœa; blenorrhœa oculi (ophthalmie blenorrhagique,) inoculated without result.**

Mas——, aged 26, entered Aug. 16, 1834. This patient had been fifteen days affected with gonorrhœa; it had been very acute, and the discharge copious. During four or five days, the left eye had been affected with purulent ophthalmia; at its commencement, there was only a kind of mucous hyper-secretion; twelve hours later, pus

* This case ought to have been inserted under the head of gonorrhœa. R.

was produced, and acute pain was felt above the eyebrows; the urethral discharge continued. At the time of his entry, the eye was much inflamed, the palpebral mucous-membrane, presented here and there granulated engorgements of the follicles; the secretion was greenish and copious.

Aug. 17th. A seton was drawn in the neck; thirty leeches were applied to the temples, and an enema of *mel. mercur.* and *ol. ricini* was prescribed. Lotion of *decoct. malvæ* and emollient compresses were applied to the eye.

The 18th. The affection progressed rapidly; there was a hardened œdema on the eyelids, photophobia, and a sharp and acrid secretion of tears; the secretion of purulent mucous, was very copious; there was an incipient chemosis. A superficial cauterization was made with *argent. nitr.* on the internal surface of both eyelids.

The 21st. The cauterization was discontinued, on account of the increasing induration of the palpebræ.

The 22nd. Thirty leeches were applied; fifteen on the temple, and fifteen in the mastoid region; an enema, with *magn. sulph.* was prescribed.

The 23rd. The indurated œdema continued, but had made less progress; there was no febrile reaction; the urethral discharge was still very copious; the palpebral surface of the conjunctiva was ulcerated at several points; *belladonna* and *calomel* pills were ordered; the cornea was becoming opaque.

The 28th. The swollen and indurated eyelids, scarcely allowed the cornea being seen, it seemed flattened; a bloody serous fluid escaped; we thought the eye was perished. The patient having in the previous night laid on his right side, the pus from the left eye had flowed into, and inoculated the right, which till then, had remained unaffected. Suppuration had already commenced. The pus of the discharge from both eyes, and from the urethra, was inoculated on the right thigh; from the commencement, the mucous-membrane of the right eye had been cauterized with *argent. nitr.*

The 26th. There was a decided improvement; a fresh cauterization and an enema were ordered.

The 27th. The inflammation was decreasing; a collyrium of *zinc. sulph.* was ordered; the inoculations had produced no effect.

The 28th. The cauterization with *argent. nitr.* was repeated. Small granulations were perceived on the conjunctiva; the left eye was sensible to the light.

The 30th. The patient could distinctly discern objects; the collyrium was continued; and injections of *zinc. sulph.* ordered for the gonorrhœa.

Sept. 1st. The right eye was well, only a little redness remained; the patient could see without pain; he could distinguish objects with the left eye. The gonorrhœa was treated with injections, and *copaiva* in bolus.

The 30th. The patient left quite cured.

CASE III. *Chancre, symptomatic bubo, mucous tubercles, ecthyma; inoculation with positive result for the bubo, and negative for the ecthyma.*

Leg— Louis, aged 18, entered February 27, 1836. Two months previous, this patient had entered the Hospital St. Louis, where he was treated for a chancre, followed by a bubo on the right side. A fortnight after quitting the hospital, after severe exertion, a fresh bubo made its appearance on the left side. We found on his arms and thighs pustules of ecthyma; at the posterior part of the penis, were some mucous tubercles; about the middle of the internal surface of the right thigh, an ulcerated point was covered with a thick crust. In order to ascertain whether this latter ulcer proceeded from a direct application of chancre pus, or solely from the ecthyma, its pus was inoculated on the right thigh.

Feb. 28th. The inoculated point was surrounded by a circle formed with nitrate of silver, that it might not be confounded with the neighboring pustules.

March 3rd. The puncture was cicatrized; the bubo was opened, and on the following day its pus was inoculated on the right thigh; on the 5th, it was red and pointed; on the 7th, the pustule was fully formed, and had all the appearances of an incipient chancre; it was cauterized with argent. nitr.; ordered pil. hydrarg. ioidid.; cataplasms to the open bubo; to the mucous tubercles, calomel and sod. chlorin.

The 15th. There was a remarkable amelioration; the mucous tubercles had disappeared.

The 21st. The bubo had begun to cicatrize.

April 6th. The crust of the ecthyma was falling off at nearly every point.

The 20th. Only a few brown spots remained; the bubo was cicatrized; two ulcers remained, one in the plica cruris, the other on the scrotum, they were dressed with vin. arom.

May 19th. The ulcers were not quite cicatrized.

June 7th. A fistulous passage, which maintained the suppuration, was laid open.

Aug. 19. The patient left quite cured.

CASE IV. *Transformed chancre and mucous tubercles inoculated without result.*

Lhr— Josephine, aged 19, entered July 14, 1836. This patient had, seven weeks previous to her entry, contracted a chancre at the entrance of the vulva; at first the progress of the ulcer was regular; it extended itself but little; but about three weeks after its commencement, its ground became raised, and passing into an unhealthy state of reparation; it assumed the appearance of ulcerated mucous tubercles; nearly at the same time, an eruption of mucous tubercles appeared at the vulva. We found the transformed chancre in the midst of a patch of mucous tubercles, with which it might easily be confounded; the vagina and cervix were healthy; the abundant secre-

tion, covering the introitus vaginæ, was produced by the ulcerated tubercles alone. Some pus was taken from the surface of the transformed chancre, and inoculated by two punctures made on the left thigh. The pus taken from the surface of the tubercles of the vulva, was inoculated in the same manner on the right thigh; the surface of the chancre was cauterized, and dressed with calomel cerate. To the tubercles, dressings of calomel and sod. chlorin. were applied.

The 19th. None of the inoculations had taken effect; the purulent secretion was less by half.

The 25th. There was no more suppuration; the mucous tubercles were dry and began to disappear.

The 30th. The skin on which the mucous tubercles were situated, was perfectly supple; the cicatrix was rose-colored, and well formed on the part of the vulva, which was but slightly ulcerated.

Aug. 8th. All was well, and the patient left the hospital.

CASE V. Chancres in the period of reparation; mucous tubercles of the anus and labia; inoculation without result.

Mic—— Julie, aged 18 months, entered April 24th, 1833. We had no very exact details of the antecedents. The parents stated that they had never had any syphilitic affection, and that the disease must have been communicated by their neighbors, in whose care the child had been left; and indeed, the woman, who was entrusted with the care of the child, as well as her husband, were actually affected with chancres. We found the little girl strong, and well formed; its limbs were more developed, than is usual at this age; the sexual organs appeared to have been pulled asunder, by attempts at coition, and upon the whole, there appeared to be an abnormal super-excitation. There was already some hair on the mons veneris, and around the anus. At a considerable depth in the vulva, we perceived some ulcerations, having the appearance of transformed chancres, and ulcerated mucous tubercles: and lastly, at the commissure of the labia, were mucous tubercles.

The 24th. The ulcerations of the vulva, were inoculated by two punctures made on the left thigh; dressings of decoct. malvæ, and poppy heads, were applied.

The 26th. The pus from the ulceration on the labia, was inoculated by two punctures on the right thigh; the inoculations made of the 24th, had produced a pseudo-pustule, which was nearly dried up. The anus was dressed with calomel and sod. chlorin. and pills of hydrarg. proto-iod. broken into a spoonful of sudorific syrup, were given internally.

The 28th. The last inoculations had produced nothing; the pus of a mucous tubercle at the anus, was inoculated on the right thigh.

May 10th. The inoculation on the 28th of April, had produced nothing; the ulcerations of the vulva were better, but much irritation was kept up by masturbation; the dressings were continued.

The 20th. The mucous tubercles at the anus, had disappeared; only

a single ulcerated point remained. The vulva was nearly well; the ulceration of the commissure of the labia, was touched with mel. iod.; they were nearly cicatrized.

The 30th. All was well; the general health of the child had always remained excellent. On the 10th of June, she left the hospital.

CASE VI. Chancres; acute ecthymatous syphilitic eruption inoculated without result on the patient, and on a healthy individual.

Huh—, aged 24, entered July 8th, 1835. The patient was unable accurately to state, at what period he had contracted chancres on the anterior and superior part of the glans, and mucous-membrane of the prepuce; he stated he had perceived it at the same time as a gonorrhœa, which three months previous to the time of his entry, had developed itself eight days after a sexual connection. In the commencement, the gonorrhœa was very acute, it was not treated by active means; the chancres, cauterized with argent. nitr. and dressed with cerate, were healed in a fortnight, leaving induration around the cicatrix. We found still some discharge from the gonorrhœa, of a whitish yellow color. Three weeks previous to his coming to the hospital, a pustulous syphilitic eruption showed itself on the body, and in a less degree on the thighs and legs; the most irritated and largest pustules were on the back. The patient observed, that at the time the eruption first appeared, the gonorrhœa became again acute.

The 10th. Injections of argent. nitr. were ordered for the gonorrhœa.

The 15th. The pus taken from one of the pustules on the back, was inoculated by two punctures made on the left thigh; the pil. hydrarg. iod. and sudorific syrup and tisane were ordered; the injections were continued.

The 17th. The punctures had produced nothing; the gonorrhœa was much diminished; cubebs, two drachms per diem, were given; a fresh inoculation was made on the right thigh, with pus taken from a pustule on the back. Some of the same pus was inoculated by two punctures on the left arm, of a healthy individual.

The 20th. None of the punctures had produced any effect.

The 28th. Nearly all the pustules of the syphilitic eruption, were drying. The gonorrhœa had disappeared; the injections were discontinued, but the cubebs were continued.

Aug. 8th. The patient left cured; only the brown spots remained upon the body; indicating the seat of the syphilitic pustules.

CASE VII. Syphilitic iritis, deformation of the pupil; syphilitic eruption; mucous tubercles, &c.; inoculation without result.

Dura—Louise, aged 20, entered Dec. 3rd, 1833. This patient, who had been for a year previous affected with chronic gonorrhœa, having several times exposed herself to contagion, by sexual intercourse, was unable to state at what time the last infection had taken place. In the month of July previous, she had felt an itching in the

vulva, where several pimples had appeared. In October, two tumors developed themselves; one on each side, near the ang. maxill. inf.; an application of leeches caused them to disappear; but nearly at the same time, a syphilitic lenticular eruption, and psoriasis guttata showed themselves. The eyes became very sensible, and the vision was affected. At the Hôpital St. Louis, she was treated by fumigations of hydrarg. sulph. rub.; and a collyrium of aq. rosar. After this treatment had been pursued without obtaining any improvement, the patient was sent to this hospital. Upon her entry, we found the syphilitic eruption still in the acute stage; there was an iritis; the pupil was oval and drawn directly upwards;* about the anus and vulva, were granulating mucous tubercles; an examination with the speculum, showed a papulous vaginitis; the vaginal secretion was puriform; on the internal part of the middle of the right cheek, an ulceration was observed, resembling an ulcerated tubercle.

Dec. 4th. Twenty leeches were applied to the right temple; a pediluvium, and compresses dipped in decoct. malvæ to be applied to the right eye, were ordered; the left eye was in a very good state.

The 8th. A fresh application of leeches, a blister to the back of the neck, a collyrium of zinc. sulph. frictions of extract of belladonna around the orbit, pills of hydrarg. iod. sudorific syrup, and tisane, and injections with conium. The ulcer on the cheek, was cauterized with hydrochloric acid; the menses having been suppressed for three months, emmenagogues and an application of leeches in the fold of the thigh, were ordered.

The 27th. The vagina was become smooth, no more papulæ remained; the sight was still dull, but the patient was able to read; the deformities of the pupil appeared to vary in the course of the day. The ulcer on the cheek had disappeared, after the third cauterization with hydrochloric acid.

Feb. 10th. Some traces of the syphilitic eruption, and psoriasis still remained; the pupil was becoming round; it was moveable, and but little morbid sensibility of the eye remained; the vision was becoming gradually more clear; the frictions of belladonna were continued; the pupil presented the distorted form in the morning, but in the evening it was round.

The 22nd. The pupil presented an ellipsis, *whose greater axis was directed upward, and outwards*; the margin of the superior half seemed fringed and condylomatous, whilst the inferior was even; there was no effusion in the chambers; the iris was little changed in its color, which was a little deeper. Fumigations with hydrarg. sulph. rub. were ordered, on account of the syphilitic eruption, which had nearly disappeared.

The 27th. All was well in the vulva and vagina; the pupil was no longer deformed; but a few brown spots remained, marking the seat of the cutaneous eruption; some vegetations at the anus were cut off.

* The deformation of the pupil downwards and outwards, is far from being constant, as has been pretended. R.

March 12th. The cure was complete; the morbid secretion from the ulcerated mucous tubercles, had been inoculated without result.

CASE VIII. *Pustulous syphilitic eruption, ulcerated tubercle, ulceration of the cervix, and purulent uterine catarrh; inoculation without result, excision of tubercle, before the ramolissement.*

Coup——, aged 26, entered Oct. 10th, 1833. At the age of twenty, this patient first contracted an infection, and was treated with mercury for a vaginal discharge, and chancres of the greater labia. The treatment lasted nine months, during which time, frequent mercurial frictions and the liq. Van Swieten. were employed; notwithstanding all this, a copious discharge still remained. Three months later, some mucous tubercles appeared at the vulva, and a lenticular syphilitic eruption on the body; the liq. Van Swieten. was again given, but nevertheless, the affection progressed; the eruption passed from the squamous form to that of ecthyma; on the limbs, some crusts of rupia appeared; at length, the affection seemed to yield to a long continued treatment with pills of sudorifics and sublimate; but some months later, the articulation of the knees became painful and swollen. Soon after, tubercles showed themselves in the calves, and becoming slowly softened, their cavities were laid open; those on the right leg, June 2nd, 1833, and those on the left, Oct. 8th; there had been a considerable destruction of the tissues, particularly of the muscles. Upon an examination being made with the speculum, a granulating ulcer was found upon the cervix uteri; and a purulent catarrhal discharge.

Till Nov. 1st, the ulcerations of the calves were dressed with a concentrated decoction of opium; injections of decoct. alb. were ordered for the purulent vagina discharge; the ulceration of the cervix, was cauterized with arg. nitr. Internally, pills of hydrarg iod. with pulv. conii, and a decoction of hops, with anti-scorbutic syrup, on account of the lymphatic habit of the patient, were prescribed.

Nov. 2nd. The pus of the ulcer on the left calf, was inoculated on the right thigh.

The 6th. There was no pustule on the point ulcerated; the ulcers were cauterized with argent. nitr. and dressed with cerat. opii.

The 28th. The cicatrization was nearly completed on both calves; but about one third down the anterior surface of the right leg, a tubercle was felt, which developed itself slowly, and whose extent was already as large as a nut; it appeared moveable; the integuments were divided, and the little tumor was removed entire.

Dec. 6th. The wound made Nov. 28th, to extract the tubercle of the leg, was perfectly cicatrized; but the wounds on the calves, which had till this time seemed to be healing, had suddenly returned to nearly their former state; the cicatrix was entirely absorbed. It was found that the patient, thinking herself cured, had neglected the treatment. The vagina was ordered to be tamponed with dry lint; the ulcer on the cervix was healed.

The 10th. The ulcers on the calves, were touched with creosote.

The 20th. There was much irritation; the use of the creosote was suspended, and dressings of decoct. opii substituted.

Jan. 6th, 1831. The application of creosote was resumed; the internal treatment was continued. Near the malleolus externus of the right foot, the patient pointed out a tubercle, but it could not be removed, as its base was already adherent.

The 23th. The tubercle on the malleolus was suppurated; it was opened, and dressed with cerat. opii.

Feb. 1st. There was a general tendency to cicatrization, and an active granulation in the wounds of the legs; a cauterization was made with argent. nitr. and they were touched with creosote every third day.

The 10th. The ground of the ulcerations was raised, and covered with granulations, which were difficult to repress. By the 18th of March, the patient being nearly cured, was able to leave the hospital.

CASE IX. *Ulceration of the throat inoculated without result.*

Nic——, aged 20, entered May 3rd, 1834. This young man asserted, that he had never had any previous syphilitic affection, and falsely attributed his disease to an affection from drinking out of a glass with another person, who had ulcers on the lips and throat. It may be well to remark, that in our patient, the affection first showed itself at the back of the throat; at first, there had only been difficulty in deglutition; the ulcers appeared slowly; and only in the latter time a treatment by antiphlogistics had been tried; the pains had in a great measure disappeared, but some deep ulcers still remained in the throat; the tonsils were nearly destroyed; but the general appearance was not clearly syphilitic. The habit of the patient was scrofulous, and he had some ganglionic engorgement in his neck.

May 6th. The throat appeared irritated; leeches were applied to the neck; an emollient gargarism and pedilavium were ordered; some pus was taken from an ulcer on one of the tonsils, and inoculated by two punctures, made on the left thigh.

The 7th. A fresh application of leeches; the pain was much less. The inoculation on the 6th, had produced nothing; the punctures were not even irritated.

The 9th. There was a sensible amelioration in the general health; nevertheless at several points, the destruction of the tissues progressed rapidly; but little of the left tonsil remained; on the pharynx were some ulcers, whose ground was covered with a greyish pseudo-membrane; their pus was inoculated by two punctures made on the right thigh.

The 12th. The inoculations on the 9th, had produced nothing; a gargarism, with conium, was ordered.

The 14th. The pain was still better, but the destruction progressed. Dressings of mel. iod. were used till the 30th, without decided improvement.

June 1st. A decoction of hops and anti-scorbutic syrup, iodine mixture and gargle were prescribed.

The 10th. The disease had rapidly improved under the influence of the iodine; the progress of the ulceration had nearly instantly ceased.

The 20th. Rose-colored granulations were produced every where; the ground of the ulcers was raised; on the 23rd, they were touched with nitrate of mercury; the cicatrization progressed rapidly; on the following day, but a single point remained ulcerated on the seat of the left tonsil.

The 27th. The surfaces were become smooth, and the patient left cured.

CASE X. Secondary ulceration of the throat inoculated without result.

Bel—— Marie, aged 45, entered Jan. 14, 1834. This patient had a year previous to the time of her coming to this hospital, contracted ulcers on the greater labia and a gonorrhœa; she was treated with liq. Van Swieten. sudorific syrup, and tisane during six weeks. Being declared cured, she ceased all medication; but after two months in a dubious state, during which time she frequently felt a difficulty in swallowing, she was attacked with a very violent pain in the throat. Leeches were applied, and a mercurial treatment ordered, which was continued during five months. As she did not find any improvement, she came to the hospital, where she was treated with pil. hydrarg. iod. and a gargle of decoction of conium and morel. with sublimate for the ulcers, which she then had in the throat; she stayed three weeks, and left when the symptoms had disappeared; she returned with ulcers, engaging half the substance of the right tonsil, arcus palat. ant. of the same side, and forming excavations with indurated and irregular edges in the posterior of the throat.

The 16th. Some pus was taken from one of the points, affording the most suppuration, and inoculated by two punctures on the right thigh. The same gargle was ordered, as on the previous occasion.

The 18th. The punctures had produced no effect; the same treatment was continued till Feb. 1st. The ulcers were a little cleaner, but the margin was still raised and indurated; the pills of hydrarg. iod. were prescribed.

Feb. 1st. The ulcers were very painful, and still in the progressive stage; they were touched with a brush, dipped in creosote; ten minutes after the application, the pains were less; it was repeated on the three following days.

The 5th. There was a little irritation; an emollient gargarism was ordered. On the 8th, creosote was again applied; by the 12th, the extent of the surface of the ulcers was less, and their raised edges had become reduced.

The 24th. The cicatrization was going on well; there was no pain in swallowing. Four days later, the cicatrization was completed, and on the 8th of March, she left cured.

April 26th. She returned to the hospital with an extensive ulceration, occupying the whole of the velum palatinum; its form was triangular, and the posterior angles towards the arcus, and its base towards the throat; the uvula was much ulcerated at its base, and nearly detached; all around the ulcer was much inflamed; its ground was greyish, and its edges abrupt; some of the pus was inoculated on the right thigh. Twelve leeches were applied to the ang. maxill. inf. and a gargarism of decoct. malv. et capit papav. ordered.

May 1st. The inoculations had produced nothing; some inflammation still remained; leeches were again applied.

The 11th. Pil hydrarg. iod. with pulv. conii were prescribed; the ulceration was very painful.

The 17th. The destruction seemed arrested; the uvula was detached, and the arcus had lost much substance.

The 20th. The ulcers were touched with mel. iod. A fresh inoculation was made on the right thigh, with the pus taken from the right tonsil.

The 30th. The inoculation was without effect; there was a general improvement.

June 10th. Nearly all was healed; the margin was no longer raised, and the pain had disappeared.

The 25th. The cicatrization was complete; in a few days, the patient left the hospital; we saw her a year later, when she had remained free from any return of the affection.

CASE XI. Consecutive ulceration of the throat inoculated without result.

Gab——, aged 34, entered May 30, 1835. This patient had no ulceration on the sexual organs; no pus came from the urethra upon pressure; nor was there any trace of a recent cicatrization; only, near the frenum a white, but not indurated spot was observed, which had been the seat of a chancre, contracted eight years before, and which had lasted about a month; the ulcer had been treated with ung. hydrarg. and red precipitate. Since this time, there had been no new infection; the patient had not often exposed himself to it. After the chancre was cured, no symptom had appeared, which could be ascribed to syphilis; when about a year previous to his coming to the hospital, having been at work in a very damp situation, and living upon bad food, he felt a pain in the throat: at first, there was difficulty in swallowing; then smarting pains, irritation of the mucous-membrane of the pharynx and mouth, pain in the epigastrium and acid eructation. These symptoms soon became less intense; but there remained in the throat on the mucous-membrane of the œsophagus and left tonsil, an ulcer with abrupt edges, and greyish ground, covered with a pulpy membrane, thus apparently presenting the characteristic appearance of a secondary ulcer. Till this day, the patient had received no treatment, he had merely, from time to time, used a gargle of decoct. malvæ; the breath was very fetid; the ulceration very extensive and oc-

cupying nearly the whole of the posterior of the pharynx; the left tonsil was half destroyed. The state of the digestive organs was sufficiently good to allow of mercurials being given.

June 8th. The pus of the ulceration of the throat, was inoculated by a puncture on each thigh.

The 18th. The punctures had produced nothing; pills of hydrarg. iod. were ordered, with sudorific tisane and syrup, and a gargarism of a concentrated decoction of conium, with sublimate.

The 25th. There was little improvement; the state of the digestive organs was still good; the treatment was continued; two pills were given; the ulceration was cauterized with nitrate of mercury.

The 30th. There was a little improvement; the use of the sudorific syrup and tisane was suspended, on account of too great an irritation; the pills were continued; but only one was given per diem.

July 6th. Decided improvement; the surface of the ulcer was freed from the greyish membrane which covered it. Anti-scorbutic syrup was prescribed.

The 20th. The tonsil was nearly well; the granulations were cauterized with arg. nitr.

The 30th. The ground of the ulcer was covered with healthy granulations; its extent was diminished by half; the digestive organs were in a good stato; the patient left cured, Aug. 8th.

CASE XII. *Ulceration of the breast inoculated without result.*

God—— Eulalie, aged 25, entered March 22, 1834. 'This patient stated, that she had never had any primary syphilitic affection; that her husband's health had been always good, and that her breasts had never been sore whilst suckling. Four months previous to our seeing her, she took a nurse-child; it was very thin, but had neither on the mouth, nor any part of the body, any wound or ulceration; three weeks later, pimples appeared on the forehead, and at the anus; their surface became purulent, and covered with crusts; it had on the body, some patches covered with squamæ; on the nates and calves of the legs, deep ulcerations; the suckling was continued for six weeks, but as the disease increased every day, the child was taken back to its parents and died. Till that time, the nurse had had no symptoms; but a week later, on both breasts, near the nipples, fissures formed, one on the left side, and four on the right. Nevertheless, she continued for a fortnight to suckle her own child, who had never ceased to enjoy an uninterrupted good state of health; the breast was dressed with opiated cerate, and a decoction of hyoscyamus; then ulcerations having succeeded to fissures, and the pains having become very acute, the patient resolved to come to the hospital. On each side on the breast and nipples, were ulcers, with greyish ground, abrupt irregular edges, and resembling, although simple, syphilitic ulcers.

The 26th. The pus from the right breast, was inoculated on the right thigh, and that taken from the left, on the left thigh; dressings with cerat. opii were ordered.

The 27th. The punctures were red; but on the following day, no pustule was produced; simple dressings were applied to the ulcerations.

April 6th. All was becoming clean; there was a decided improvement.

The 12th. The ground of the wounds was nearly level with the surrounding parts; the patient was obliged to leave the hospital on business; and returning some time after, we found only one deep fissure remaining, whose pus was inoculated on the left thigh, but without result; a lotion of sod. chlorin. was applied, and in a week's time, she left quite cured.

CASE XIII. Ulcerations of the lip; sub-maxillary engorgement; inoculation without result.

Vil—, aged 18, entered Nov. 15, 1836. This patient assured us, that he had not for a long time had any sexual intercourse; he had no wound of any kind on the sexual organs; but on his lip, a little distance from the commissure, was an ulceration, which had existed about a month. In the commencement, the patient stated, there had been only a little pimple, which having been scratched off, became ulcerated. It ought to be remarked, that the teeth were black, and the gums retracted from them, by the use of the pipe. No treatment had been used; the sub-maxillary engorgement had existed about ten days. We found the ulcer of the lip much irritated; the engorgement was subacute in its progress; the pus from the ulcer on the lip, was inoculated by two punctures on the right thigh; cataplasms were applied to the swollen sub-maxillary glands.

The 18th. The punctures had produced nothing; the wound on the lip was cauterized with argent. nitr. and dressed with vin. aron.

The 21st. The engorgement had nearly disappeared; the ulcer on the lip was half dried up; it was again cauterized. About a week later, the wound was quite healed, no induration remained, and the patient left the hospital.

CASE XIV. Ulceration of the tongue and finger of a doubtful appearance; inoculation without result.

Bel—, aged 48, entered Dec. 8, 1835. This patient had never had any chancres; at the age of thirty, he had had a gonorrhœa, which lasted three weeks, and then disappeared without any treatment; since then he had felt no symptom, which would lead us to consider the gonorrhœa, as depending on concealed chancres (*chancres larvés*); there never had been any induration in the canal of the urethra. Four months previous to the time of his entry, without any known contagious cause, he became feverish from too severe fatigue; a few pimples appeared about the base of the tongue; at first, there had been much pain. We found the superior surface, near the base of the tongue, ulcerated; on some points were granulations, and in the intervals between them, deep excoriations; the left side was not so much

affected as the right; there were on the ulcerations, greyish cavities, with abrupt edges; the wounds were much inflamed, and yielded much pus; no indurated knot was perceived in the tissue of the organ. On the last phalanx of the median finger of the left hand, was an ulcerated spot, covered with a crust in layers.

The 11th. Some pus taken from a wound in the tongue, which appeared to be in the progressive or ulcerative period, was inoculated on the left thigh. In like manner, some of the pus from the ulceration on the finger, was inoculated on the right thigh; the surface of the tongue was cauterized, and a gargle of conium and morchella prescribed; the finger was dressed with calomel and opium cerate.

The 14th. The inoculations were without effect; the tongue was much less inflamed; the same treatment was continued.

The 16th. A fresh inoculation of the pus taken from the tongue, was also without result. By the 30th, the patient was cured, and left the hospital.

CASE XV. Tumor and ulceration on the posterior part of the penis inoculated without result.

FO—, aged 28, entered Feb. 21, 1837. This patient had never had chancres; about five years previous, he had had a gonorrhœa followed by a bubo, which being treated by active means, disappeared in a short time: from that time he had perceived nothing, which he could attribute to a syphilitic infection. At the time of his entry, three months had elapsed since he had had any sexual intercourse. In consequence of great exertion and fatigue, a tumor appeared at the posterior of the penis; it had existed about a week when we saw him; pus had rapidly formed, and the tumor opened spontaneously, and presented a considerable ulceration.

The 23rd. Some pus was taken from the depth of the ulcer, and inoculated on the right thigh; dressings with vin. arom. were applied. Four days later, the punctures had produced no effect.

The 30th. The whole surface of the ulcer appeared in the period of reparation; some granulations were slightly cauterized.

March 4th. All was cicatrized; no induration remained; the patient was dismissed.

CASE XVI. Cancer uteri inoculated without result.

NEV— Marie, aged 32, entered May 8, 1834. It was difficult to trace out the evident cause of the actual state of this patient from among the antecedents: she became regular at the age of fourteen, and continued to enjoy a good state of health, till the age of twenty, when she had her first child; two years later, she had a second; from this time forward, there was an irregularity in the menstruation, then at long intervals, copious flour albus. A year previous to her coming to the hospital, she contracted a gonorrhœa, which at its commencement caused no pain. Her husband had a chancre, but she had no ulceration, at least not on the external part of the sexual or-

gans. Six months later, the discharge, which seemed to have decreased, returned with great intensity, and a state of progressive marasmus soon ensued. The patient consulted a surgeon, who stated she had an engorgement and hypertrophy of the cervix uteri, and prescribed a bath every second day, and ordered her, to be bled once a week, a mucilaginous tisane, pil. conii, and local baths with morel and mallows: this treatment had been continued with absolute rest for six months; but having obtained no amelioration, she determined upon coming to the hospital. Upon an examination with the speculum, an ulceration was found at the orifice of the uterus of a lardaceous appearance, with a sero-purulent secretion without smell, and general induration without hypertrophy. Some of the pus was taken from the cervix, and inoculated by three punctures made on the left thigh. Injections of decoct. conii c. morell. pills of hydrarg. iodid. and fol. conii were prescribed.

The 13th. The inoculations had produced nothing; the ulceration progressed slowly, but the destruction and induration were still increasing.

The 24th. The carcinomatous nature of the affection was every day more evident. A tampon, covered with mel. iod. was placed on the cervix.

The 26th. The darting pains were very acute.

June 11th. A careful examination was made in order to ascertain whether the operation would be practicable. Opiated injections were prescribed, and the pil. opii given at bed time; the use of the iodine was suspended.

July 6th. The affection still increased, though slowly; the patient was advised to go to the Salpêtrière.

CASE XVII. *Chancres, phimosis; dubious pustule at the navel inoculated without result.*

Aug—, aged 20, entered Jan. 24, 1837. This patient had, for the space of a month, been affected with chancres on the prepuce, in consequence of which a balanitis and phimosis resulted; the inflammatory state had been of short duration. We could easily uncover the glans, on which were some excoriations; some of the chancres were in the period of reparation. About ten days previous to the time of our seeing him, a pustule appeared near the inferior part of the navel, and followed in its development, the course of the pustules from inoculation; at first, red and pointed, it soon became raised, and almost umbilicated; the epidermis broke and showed a small ulcer, which we found, covered with a crust like that of ecthyma; the base was indurated. Upon the crust being removed, the wound presented the appearance of a chancre; the edges were abrupt; the ground appeared in the ulcerative or progressive stage; some of the pus was inoculated on the right thigh. The chancre on the prepuce, was cauterized and dressed with vin. arom.; the excoriations on the glans were also superficially cauterized.

The 28th. The inoculation had produced no effect; the same treat-

ment was pursued. Three days later, the excoriations on the glands were healed; the chancre on the prepuce was nearly dried up; it was slightly touched with the caustic; the wound on the abdomen had become much less, and was granulating; its base was but little indurated. In a few days time, the patient left cured.

CASE XVIII. *Chancre, rupia, exostoses, osteocopic pains; inoculation of the pus of the rupia without result.*

Des— Antoine, aged 36, entered Aug. 22, 1835. The commencement of the affection was five years previous to the time of his coming to the hospital; at first, he had a chancre on the glans, which only disappeared after being treated for a month with mercury. A fortnight after the cicatrization of the ulcer, some crusts of impetigo appeared on the scalp, and also a syphilitic eruption; on the arms, were some pustules of ecthyma; these symptoms were treated with pills of mercury, frictions, and fumigations, with hydrarg. sulph. rub. Nevertheless the disease progressed; exostoses were developed on the forehead, and the joints became the seat of violent pains. On the malleolus externus of the right foot, extensive ulcerations were formed; on the back and arms, an eruption of rupia appeared; at length, the symptoms had nearly disappeared, and the patient thought himself cured, when soon after his leaving the hospital of St. Louis, the same symptoms returned, and also acute osteocopic pains; about the middle of the external part of the arm, tubercles of the cellular tissue formed, and produced extensive ulcerations. Upon his entry, some pus was taken from one of the ulcerated pustules of rupia on the deltoid region, and inoculated on the right thigh, by two punctures; pills of hydrarg. iodid. decoction of hops and anti-scorbutic syrup were prescribed; the ulcers were dressed with opiated cerate; slight blisters were applied to the forehead and other parts, in which the pains were felt.

Aug. 6th. The inoculation of the pus of the rupia had produced nothing; the pains were somewhat less; blisters were ordered to be again applied on the following day.

The 10th. Some pus taken from an ulcer on the arm, was inoculated by two punctures on the left thigh.

The 20th. The osteocopic pains had disappeared; the appearance of the ulcers was improved; the granulations were cauterized.

Sept. 10th. The exostoses on the forehead had disappeared; all was going on well, and by the 2nd of October, the patient was quite cured, and left the hospital.

A

TABLE OF THE INOCULATIONS,

MADE IN THE MALE WARDS,

1831—1837.

SYMPTOMS WHOSE PUS PRODUCED THE CHARACTERISTIC PUSTULE.

PRIMARY SYPHILIS.

Chancres in the ulcerative or progressive period—	
On the penis	347
At the anus	9
Concealed in the urethra (larvé)	21
On the lips	3
In the throat	1
On other parts	8
Primary pustules—	
On different parts consequent on coition, or from artificial inoculation	59
Virulent abscess or encysted chancres—	
In various situations	18
Symptomatic lymphitis, or chancres in lymphatics—	
Inoculated upon the day of their being opened or later	11
Symptomatic bubo, or ganglionic chancres—	
Inoculated the day they were opened	42
“ “ following day*	229

IN THE FEMALE WARDS,

1831—1836.

PRIMARY SYPHILIS.

Chancres in the ulcerative period—	
On the vulva	139
“ vagina	2
“ cervix uteri	12
Concealed	5
At the anus	28
On the lips	4
In the throat	2
On divers seats	6
Primary pustules—	
On various seats consequent on coitus; on the internal surface of the thigh, or from artificial inoculation	27
Virulent abscess or encysted chancre—	
In various situations	8
Symptomatic buboes, or ganglionic chancres—	
Inoculated upon the day of their being opened	21
“ “ the following day or later	46

* Of these latter, 214 had been inoculated without result on the day of the opening.

IN THE MALE AND FEMALE WARDS,

1831—1837.

SYMPTOMS WHOSE PUS PRODUCED NOTHING.

SYMPTOMS OF TRANSITION.	
Chancres in the period of reparation	62
SECONDARY SYPHILIS.	
Mucous tubercles, or pustules on various seats	221
Secondary ecthyma	10
“ rupia	9
Ulcers (consequent on mucous tubercles, ecthyma, rupia, or impetigo)—	
In the fossæ nasales	19
On the lips	14
“ palate	4
In the throat	81
At the anus	41
TERTIARY SYPHILIS.	
Tubercles ulcerated in the whole thickness of the skin in various situations	21
Tubercles in the cellular tissue or gummy tumors ulcerated, on various seats	11
Periostoses having suppurated	15
Caries	10
VENEREAL AFFECTIONS, NOT DEPENDANT ON THE SYPHILITIC VIRUS.	
Spontaneous buboes	39
Symphathetic “	248
Gonorrhœa in the acute stage—	
Of the glans and prepuce (balanitis)	82
In the urethra	291
“ vulva	31
“ vagina	82
“ uterus	27
At the anus	36
Ophthalmia	6
Gonorrhœa in the chronic stage, having various seats	112
Ulcerated swelled testicle	3
NON-CHARACTERISTIC SYMPTOMS WHICH SHOW THEMSELVES AFTER VENEREAL AFFECTIONS, WHETHER SIMPLE OR VIRULENT.	
Vegetations, either ulcerated or not, having various forms and seats	29
AFFECTION NOT DEPENDANT ON VENEAREAL DISEASES. COMPARATIVE EXPERIMENTS WITH NEGATIVE RESULT.	
Atonic ulcers of the legs	6
Simple ecthyma	5
Herpes	4
Scorbutic ulcers	2
Scrofulous	6
Caries	4
Simple ulcerated stomatitis	8
Ulcerated eczema intertrigo	2
Otitis	2
Cancer of the uterus	5
“ “ rectum	6
“ “ breast	2
“ “ penis	3
“ “ nose	4
Abscess on various parts	15

I may here add, in support of these tables, the result of some experiments, made with the same view in the hospital at Louvain, by Dr. Mairion.

“ My experiments, says Dr. M. were made upon 257 patients in the military hospital, at Louvain, in the year 1836; 29 of them could not be submitted to inoculation; of the 228 who were inoculated, 85 had primary ulcers, 24 suppurated buboes, 84 gonorrhœa, 7 excrescences, 28 constitutional symptoms.

Primary Ulcers.

“ Of the 85 cases of primary ulcers, 53 produced upon inoculation chancres, whose syphilitic nature was proved by their pus being inoculated, and producing others resembling them, which being also inoculated, produced ulcers of the third generation and so on, till the specific properties of the chancre molecule was destroyed by chemical applications, or exhausted in the natural progress of the chancre in its course towards reparation. As long as the chancre was in the progressive stage, the pus remained inoculable.

“ Inoculation, carefully made under the above circumstances, has always succeeded; I never found a chancre, whose pus upon the first trial produced nothing, give a contrary result in ulterior experiments.

“ When inoculation is successful, it causes the development of an ecthymatous pustule, whose progress and result I have ever found uniform and constant.

“ In 32 cases of ulcerations, inoculated in various stages of their existence without effect, the puncture was followed by a slightly inflamed aureole, having the little wound produced by the lancet in the centre; these symptoms generally disappeared in less than twenty-four hours. Some times I have observed the epidermis a little raised, which by an unaccustomed eye, might be taken for the primary pustule of chancre; but this error would soon be rectified, as the raised epidermis soon returns to its natural state, leaving no trace of the inoculation.

“ Numerous inoculations were made in the same year, with pus taken from wounds, ulcers, fistulous passages, and always with negative result.

Buboes.

“ From our experiments with the pus from buboes, we arrived at the following conclusions.

“ I. That syphilitic ulcers are often complicated with buboes, which is less frequently the case with simple ulcers, and they but rarely accompanying gonorrhœa.

“ II. That the buboes, which accompany chancres, may be either sympathetic or idiopathic; that the former generally appear before the thirteenth day, and that the latter can appear at any period of the existence of a chancre; but chiefly after the thirteenth day, and during the stationary period.

“ III. That the idiopathic buboes always suppurate, whatever treatment may be used.

“ IV. That the pus of buboes, which accompany chancres, and have suppurated, has generally produced the characteristic pustule of the chancre upon inoculation.

“ V. That the buboes which have accompanied ulcers, the specific property of whose pus had been disproved by inoculation, have never, even when they have suppurated, produced any result upon inoculation.

Gonorrhœa.

“ Of 85 cases of gonorrhœa, which came under my observation, 4 were found by inoculation to be of a syphilitic nature, (concealed chancres, chancres larvés,) and produced chancres, which again produced others; 80 submitted to the same test, produced no result, whatever number of punctures were made, or at whatever period the discharge might be. The result of the inoculation in the other case, was omitted to be noted.

Symptoms of constitutional syphilis.

“ Having inoculated 28 cases of constitutional syphilitic affections without effect, I felt convinced, by this small, but varied number of tests, that none of the constitutional symptoms are susceptible of inoculation.”

PART THE THIRD.

THERAPEUTICAL SUMMARY.

CHAPTER I.

EXPOSITION OF THE METHODS OF TREATMENT, WHICH HAVE PROVED MOST SUCCESSFUL AT THE HOSPITAL FOR VENEREAL DISEASES.

GENERAL REMARKS.

As this title shows, and as I announced in the commencement of the work, it is not my intention to furnish a complete treatise on the therapeutical treatment of venereal diseases; but merely to point out the means, which have appeared to me most efficacious, and which I generally employ.

I shall always point out as clearly as I can, the indications which have directed me in the choice of the methods I have employed, without entering into the history of the symptoms, which will be understood from the sketch which I have traced out.

In the first place, by venereal diseases, are to be understood, all those which are generally contracted in sexual or venereal intercourse, and which generally commence in the sexual organs, although they may originate in other circumstances, and other regions.

This great class is divided into two distinct orders; the first comprising chancre, and all its consequences from infection of the system, and whose cause is the venereal virus; for this order, the term syphilis ought to be retained; the second embracing the non-virulent affections, such as gonorrhœa, and its consequent diseases, which never depend on the constitutional infection, as well as a great number of other symptoms; simple ulcerations, phimosis, paraphimosis, gonorrhœa, orchitis, &c. To this order, the name of pseudo syphilis might be applied.

I shall now proceed to the consideration of this third part, commencing with a short exposition of the prophylactic treatment in general.

PROPHYLACTIC TREATMENT OF THE PRIMARY VENEREAL DISEASES.

If the art of preventing disease ought to rank highest, negligence or prejudice, causing prophylactic cares to be omitted, deserve the greatest reproach, especially where affections so terrible in their consequences are concerned.

But what contradiction in science, and those who practice it ! for whilst on one side, the greatest encouragement is given, on the other, blame, or at least ridicule, are the sole rewards; thus, whilst every year, a number of medals are conferred, by the Académie Royale de Médecine, on those who, by propagating vaccination, have opposed the ravages of small-pox; we see the same body startled, when any remedy to arrest a still more frightful scourge, is submitted to its judgment. Undoubtedly, most of the preventives of syphilis hitherto have been culpable mercenary speculations of quacks; but does it therefore follow, that this was and will still be the case with all? No, undoubtedly not, and in the present age, the foolish prohibitions of false morality, no longer compel us to regard venereal disease as a punishment reserved by heaven for libertinism, and which man ought to respect. The creator of all things, who has so lavishly bestowed the principle of preservation in opposition to all things, which attack our existence, has certainly not desired that man's ingenuity, otherwise so prolific in its resources for preservation, should remain inactive in face of the greatest danger, threatening life at every moment, and even at its source. No, the truly wise, virtuous, and philanthropic moralist will say with Horne, that he must be considered as the true benefactor and preserver of his race, who should discover the true secret of preserving us from the most terrible contagion, which ever threatened mankind.

To the honor of the Société des Sciences Médicales de Bruxelles, it has not been afraid to offer, as a prize question, the following important inquiry.

“What measures of medical police are most adapted to arrest the propagation of the venereal disease?”

I hope this example may not be lost, and that similar questions may be proposed, and less circumscribed; for the most efficacious means must be beyond the jurisdiction of a medical police.

In the present state of science, what prophylactic means can be opposed to the primary affections? It is not my aim to examine all the various means proposed by credulity and ignorance, or emanating from more learned than useful theories of men of just celebrity.

It must be apparent, that it is necessary, by all known and justifiable means, to isolate the patients, warn them of their danger, and of the harm they may produce; that it is the duty of the surgeon who undertakes so delicate a mission, to examine with the most scrupulous attention, those who can become the source of infinite infections, as the filles publiques (or licensed prostitutes).

The examination ought here to be neither slight nor illusive; not only ought the external parts of the organs to be examined, but also the internal and more concealed; for the source of the poison, which it is wished to avoid, often lays in the depth of the vagina, on the cervix of the uterus, or even in its cavity; and in these cases, neither an external examination, nor the *toucher* would suffice, and the speculum alone could warn them of the danger. I think that I have rendered

some service to science, by applying the speculum in the study of venereal diseases, and more especially, as a measure of medical police; but in order that the visitations of the *filles publiques*, either with the aid of the speculum, or otherwise, may serve as a guarantee, they must at least be repeated every third day; experience having shown me, that the chancre pus is contagious on the third day after inoculation, and sometimes even on the second. From the foregoing, it must be evident, that the examinations, as at present conducted, are very insufficient; one class being examined once a month, and another every eighth day.

Under the head of prophylaxy, must be included every means which, by destroying the focus, diminishes the propagation: and therefore, amongst others, the hospitals and gratuitous consultations, which are provided by the judicious administration of the Paris hospitals. By facilitating the means of cure, and pointing out those which can prevent the disease, the greatest success is to be looked for. The fear of evil, restrains less; and most frequently, corporal, or moral punishments, have only produced bad results; for neither the confinement in the castle of St. Germain des Prés, nor the whip at the Bicêtre had beneficial results in the good times, when they were practised; far from this being the case, the number of victims to be exiled, and the rank of those who ought to have been whipped, were become such, that these punishments naturally fell into disuse.

The prophylaxy is to be considered under two distinct heads; the first concerns the individual who may infect, and the second, the one who may become infected.

For the former, beside the before-mentioned visitations, cleanliness, the use of lotions and injections, ought to be recommended, with chlorides and soap, and the other means best calculated to clean and disinfect by chemically changing the morbid secretions. *If, in general, women were more cleanly and careful of themselves, the venereal diseases would be far less common.* How many women have received the contagious matter, and transmitted it without becoming infected themselves!

For the latter are to be advised, a scrupulous examination of the organs, to ascertain that no lesions exist. Here the alkaline lotions, &c. are hurtful, as they are liable to wound the surface, and thus cause a peculiar liability to infection; but astringent lotions on the contrary may have a beneficial effect. And amongst the most efficacious may be mentioned, a solution of alum, acetate of lead, wine alone or with tannin, provided they be well applied, and for a sufficient time. Fatty substances are much less to be depended upon. Every lesion of the skin, which may be discovered after a connection, ought to be immediately cauterized to prevent further consequences.

CHAPTER II.

TREATMENT OF VIRULENT AFFECTIONS.

PRIMARY SYPHILIS.

SECTION I.—CHANCER.

BEFORE commencing the study of curative treatment of chancre, we must mention, that the primary syphilitic ulcer, undoubtedly often heals without any treatment, and often, notwithstanding bad treatment. Yet, as the spontaneous healing of chancres is most frequently uncertain and slow, and the patient remains all the time of its duration, exposed to general infection, and to the chances of serious local affections, art ought never to remain inactive; and all its efforts ought to be directed towards destroying it in its outset, or at least shortening its duration.

But unfortunately, although all agree, that in case of any other poison, as that of the viper, or of any rabid animal, for instance, it is necessary to destroy it at once; yet, in the case of chancre, which is in all respects so analogous to it, absurd theories, supported by great names, throw a doubt over the means, which ought to be adopted for its treatment.

Properly to judge of the treatment required by chancre, we must consider it under its various forms, in its regular or irregular state, and with or without complications.

Whatever form a chancre may assume in its commencement, it ought to be treated by the abortive method; for there is no authenticated instance of ulcers destroyed within the first five days after infection, having afterwards given rise to secondary symptoms. If however it be acknowledged, that chancres ought to be destroyed as quickly as possible; it is equally clear, that the same means will not be proper in every case, and the indication for those which have been proposed, as excision, direct and mediate cauterization, deserve a moment's consideration.

Hunter, who was of opinion that chancres ought promptly to be destroyed, says, without distinguishing the forms they may at first assume, that cauterization is preferable to *extirpation*, when they are situated on the glans, whose less acute sensibility excites less pain, and exposes less to hæmorrhage, whilst excision is better calculated for those cases, in which the skin is affected; and the whole extent of the disease, could hardly be reached by the caustic. Valuable as are the precepts of Hunter, we may yet more exactly fix the indications for their employment, by regarding the difference which chancres present at their commencement.

I. *Commencing by a pustule.* This form, which in ordinary contagion is most rare, and which may be easily confounded, during the first days of its existence, with eczema, or herpes, yields, when attacked at an early period, to a single cauterization, when well made. Therefore, whenever in the first days, after a suspicious connection, a pustule is found upon the organs, exposed to the contagion, *whatever its nature may be, and without an exact diagnosis being requisite*, it must be ruptured, and its ground well cauterized; for no bad effects would be felt, even were a mistake made, and pustules of eczema or herpes cauterized; the caustic to be preferred in this case, is a pointed piece of nitrate of silver, with which all the parts can be reached. In this case, if the pustule be seated on moveable tissues, which can easily be removed; the excision might be made, did not the patients generally manifest great repugnance to any operation of this kind, however slight. When, however, recourse is had to the excision, it is always better to remove, rather more than less than necessary, as the sound tissues will rapidly heal; I usually use the curved scissors for the operation.

II. *Ulceration, or original chancre.* This form, which is the most common on account of the general conditions of the infected parts, and the facility with which the newly formed pustule breaks, ought, as well as every suspicious ulcer, under similar circumstance, to be cauterized, or excised.

III. *Virulent abscesses.* A chancre can succeed an abscess in consequence of a phlegmonous process, and be seated in a follicle, the cellular tissue, a lymphatic vessel or ganglion. Whenever, in consequence of one of these conditions, the parts exposed to infection, present an engorgement of one or more follicles, the excision must be practised without hesitation, and followed by an application of nitrate of silver.

When we have already to deal with a follicular abscess, and the diseased parts are yet limited, the same course must be adopted; in the contrary case, an opening must be made, to allow the pus to escape, and the cavity must then be well cauterized. The same must be done, with regard to the small circumscribed abscesses of the cellular tissue, which are developed by means of imbibition, near a chancre, or by one of the processes we have already described.

When the disease is seated in the lymphatic system, (vessels or ganglions,) the means we have just pointed out, are not applicable, and we must have recourse to those which are employed to destroy buboes, as we shall see under that head.

But either from being consulted too late, or from the means which we have just pointed out, not acting sufficiently deep, it often happens, that there is difficulty in destroying at once, all the infected part, and the chancre is developed. Then, at whatever period of its duration it may be, or under whatever form it may have commenced, it ought to be destroyed as promptly as its seat and extent will permit. This precept, which we cannot too often repeat, and against which

unfortunate prejudices in vain contend, is, as may be easily ascertained, the result of daily observation. I have found in the subjects affected with constitutional syphilis, who have come under my observation, that the chancres had never lasted less than ten, twelve, or fifteen days, and in the majority, their existence had been prolonged to three, four, five, and six weeks, and longer.

If to the preceding we add, that certain conditions are requisite, in order that general infection should take place, and that these conditions may at first be wanting, and show themselves later in the course of the duration of the chancre; it must be evident, that so long as it is allowed to remain, the chances of constitutional infection will exist.

And we may further add, that contrary to received prejudices, if the liability to secondary symptoms does not depend on the rapidity of the healing of the primary affection, neither does the treatment applied to it, exercise any influence upon it; and therefore, that treatment, by which the local affection is most quickly cured, is the best anti-syphilitic.

In those cases, where the tissues, in which the chancre is situated, are engorged, or when it has acquired considerable extent, the nitrate of silver no longer acts with sufficient energy, and then, imitating the effect of gangrene, which it is known when it attacks a chancre, brings it to the state of a simple lesion, I have obtained very successful results by employing caustic potass, and yet better by the Pate de Vienne. This latter escharotic, must however be employed with caution, in order not to remove more than the diseased parts, or at most, only a very small portion of the healthy parts beyond. One objection to this method is, that in many cases from the extent requiring to be cauterized, some of the adjacent parts, which ought to be carefully treated, would be too much exposed; otherwise where it is applicable and properly applied, it will produce the most beneficial results. It ought also not to be omitted, that the parts cauterized, often become œdematous, and greatly swollen; wherefore, they ought to be rejected, for cauterizing chancres on the internal surface of the prepuce or glans of an individual, with any symptoms of a phimosis.

A chancre that cannot be attacked by these means, or which, notwithstanding their employment, still retains its specific character, requires other treatment.

I. Although in general, ulcers or wounds ought not too frequently to be dressed, for fear of disturbing the process of cicatrization, yet this is not the case with chancres; for here the secretion becomes a permanent cause of the disease, and ought not to be allowed to remain long, and therefore the dressings should be renewed three or four times a day, according to the quantity of the secretion.

II. Care must be taken, not to allow the cutaneous chancres to become covered with a crust, as the pus will collect and undermine the neighboring parts.

III. As long as a chancre remains in the period of ulceration, the cauterization with nitrate of silver must be repeated, as often as upon the

eschars coming away the characters of this period are found either on the ground or edges; but as soon as the reparation commences, the use of the cautery, on the parts which are healing, must be suspended.

IV. All greasy substances, are generally hurtful in the treatment of chancre; but mercurial ointment is still more so, except in a few cases. Nothing is more common, than to see chancres multiply, extend, or become inflamed, when in the absence of induration, they are dressed with mercurial ointment.

V. As we have before said, the pus secreted by a chancre, ought not to be left in contact with the surface; and it is also advisable to check the secretion. Dry lint, by forming a kind of sponge, fulfils one of these indications; but I have obtained the most rapid results from the use of the aromatic wine of the Pharmacopœia (French,) used in the following manner:—The ulcer is to be well washed with this liquid, but yet without fatiguing it, or making it bleed; it is then to be covered with a little fine lint moistened with it, but not so as to run out; for when it is too wet, the kind of maceration, which results, retards its good effects. Care must be taken before removing the dressings to moisten the lint with the same liquid, so as not to rend the parts to which they may adhere from drying.

Every one who has attended the Hôpital des Vénériens, must have had an opportunity of convincing themselves of the good effects of this treatment, which if well applied, is never followed by successive chancres, as is so often the case with other dressings. The aromatic wine diminishes the purulent secretion, and by modifying its surface, tends to promote the cicatrization of the virulent ulcer, and by acting as an energetic astringent on the neighboring parts, renders them incapable of inoculation. In some cases, the secretion continued very copious, and I then found the vinous decoction of tan succeed perfectly. If there be pain, or if the application of the wine causes it, an addition of eight or ten grains of opium to the ounce, will be found to answer well. We ought to remark, however, that in some subjects, who still continued to suffer, the pains disappear upon the dose of opium being augmented, whilst in others, it must be decreased.

In some cases, however, the use of the wine ought to be suspended for a time, or relinquished altogether; thus in some patients, upon the suppuration ceasing, the ulcer remains stationary; dressings with an emollient decoction, or with opiated cerate, ought to be substituted for some days; in other cases, the ulcer being accompanied with induration, it only increases it, and cicatrization cannot ensue: otherwise it is the usual dressing which I employ.

VI. When the period of reparation arrives, as long as it goes on regularly, the dressings with wine must be continued, and the cauterization only resumed, when it becomes necessary to repress the exuberant granulations. Often, only the epidermis is wanting to complete the cure; the surface of the ulcer become level with the neighboring parts, remains red and yields scarce any secretion, but yet does not heal; then the superficial application of the nitrate of silver, so as just

to whiten the surface without cauterizing deeply, suffices to terminate it.

VII. The local treatment suffices, when the chancres are regular and free from complication, and leave no induration on their seat. It will suffice, if the patient, during the treatment, is made to observe the most strict repose, and the treatment suited to the constitution; in robust subjects, antiphlogistics, and weakening regimen, may be required, which in weak and lymphatic habits, would prove most injurious; but here, on the contrary, a moderate tonic regimen, and in general, whatever will correct the disorder of the habit, or remedy a state of concomitant disease, ought to be employed; for it must be remembered, the vicious course which chancres may assume, results from a bad constitution, or actually existing diseases.

When the regular chancre is cicatrized, and the tissues on which they were seated, are returned to the normal state, the patient may again be permitted sexual intercourse; but this is not the case, if induration remain upon the seat where the cicatrices formed, and which by breaking, give rise to relapses; in these cases, absolute continence must be insisted upon, until the cure be quite complete.

Let us now examine the treatment, which each of the principal variety of chancre requires.

I. *Concealed chancres (chancres larvæ's.)* When the urethra is the seat of the chancre, and it is complicated with symptoms of acute gonorrhœa, recourse must first be had to antiphlogistic treatment: leeches on the perinæum and penis; emollient opiated fomentations; baths and copious draughts of mild fluids. I give every evening, two opium and camphor pills; to prevent the erections, which distend the diseased surfaces, and cause them to crack, thereby augmenting the ulceration. If small abscesses form on the points of the canal, occupied by the chancre, they must be opened early; as soon as the inflammation has subsided, injections must be made with aromatic wine at first, mixed with equal parts of a decoction of poppy heads, and afterwards used alone, if no irritation be produced. Often when the gonorrhœal symptoms are not too intense, the cauterization with nitrate of silver, by means of Lallemand's caustic holder, may be used from the commencement; it acts in this case in the same manner as upon external chancres.

If the ulcer be perceptible, and seated at the entrance of the canal, the treatment indicated for other chancres, is quite applicable to it; only where it can be borne, it is advisable to keep a small bit of moistened lint between the lips of the meatus urinarius to prevent their touching. The gonorrhœa, which under these circumstances accompanies the chancre, disappears with it, when it alone is the cause, or yields when it is only a concomitant affection to a treatment for gonorrhœa, which must be employed at the same time.

When the chancres are seated in the depth of the vagina, on the cervix uteri, or in its cavity, the speculum ought to be applied each time they are dressed, that they may be cauterized, and the necessary

topical applications made. Those situated in the lower part of the rectum, and at the anus, require to be kept particularly clean, and to be frequently dressed. The bowels ought to act freely, and it is advisable to give a small mucilaginous enema, to prevent any hard matter from scratching the diseased parts; but should the passing of the India rubber canula, cause more pain than the feces, this must be omitted; the dressings must either be applied by a small piece of lint laid over the ulcers, or by injections, as the presence of a foreign substance in the sphincter, might cause too much spasm and pain. Care must be taken not to mistake these ulcers for simple fissures, as we have seen done, and make an incision in them, which would unavoidably cause the disease to extend.

II. *Superficial chancres.* In the majority of cases these chancres present no particular indication. When they are seated on the glans or prepuce, with symptoms of balanitis at the same time, they may, if free from induration, be confounded with the simple erosions which often accompany it. In this case a superficial cauterization and a piece of fine dry linen placed between the glans and prepuce will suffice to make them disappear in a few days; but if they still remain, the whole treatment indicated above must be applied.

III. *Phagedænic chancres.* When a phagedænic chancre, of whatever variety it may be, has destroyed the frenum, produced a fistulous passage, or detached portions of the soft integuments, they must be divided or excised; for they are not in a condition to allow of adhesion. Thus, for instance, when the frenum is perforated, it ought first to be divided, and then the small portion which adheres to the prepuce cut off; the whole should then be well cauterized, particularly the subjacent ulceration.

A. *Phagedænic pulpy chancres.* We must here carefully examine the circumstances which may have given rise to them. Frequently the dwelling of the patient is unhealthy, cold, and damp, in which case the disease becomes better as soon as he changes it. From this cause, chancres contracted in warm countries, and then carried into a more northerly climate, often become aggravated in a frightful degree, and, on the other hand, in contrary circumstances, they often have a rapid and happy termination.

In this variety of chancre there is generally some visceral derangement under whose influence it seems to develop itself, in which case our principal efforts must be directed against this cause; if it be allowed to remain, or if it be increased by injudicious treatment, we cannot hope to cure the syphilitic ulcer which is dependant upon it. We must be careful not to fall into a common error of attributing the disastrous and rapid course of this variety of chancre to the nature of the specific cause or greater intensity of the virus, and thus be led, like the partisans of the old school, promptly and energetically to have recourse to the use of the pretended specific, and administer mercury in doses proportionate to the strength of the specific cause they wish to neutralize. Let it be remembered, that the principle of the syphilitic

diseases is always the same, as in variola, and the differences only depend upon the individual peculiarities.

I can confidently assert, that, except in a very few cases, the so common employment of mercurial preparations, either as dressings, or internally, are most hurtful in phagedænic chancres, and the more so, as not being accompanied by induration, there is much inflammation and nervous irritability. It is by no means uncommon to see these ulcers, when approaching the period of reparation, relapse under the influence of mercury into their former state, and chancres which were at first limited and regular become phagedænic, simply from the employment of mercury.

Whatever may have been the origin of the variety now under our consideration, whether it has succeeded to a chancre on the skin, the mucous membranes, or to a virulent bubo, the most advantageous treatment, and that which has been most frequently and promptly followed by success, has consisted in the employment of cauterizations, joined with dressings of aromatic wine: in these cases, the cauterizations ought to be deep and repeated, in some cases twice a-day, to follow the disease in its progress: the same ought to be the case with the dressings; for the morbid secretion being very copious ought to be frequently removed. Care must also be taken not to crack the edges of the ulcer in renewing the dressings; for every erosion becomes inoculated, and favors the imbibition of the virulent pus and the progress of the disease.

It has been advised, when the local inflammation is very acute, to apply leeches in these chancres. I am very cautious in this respect, the result by no means according with the expectations which some practitioners have of it; for, beside the difficulty of making them bite on ulcerated points, the ulcer will immediately increase in the depth of the wounds they make. Nor is it proper to apply leeches in the neighborhood of a syphilitic ulcer, as each bite which is touched by the pus becomes a new chancre. When the local inflammation requires an evacuation of blood, the leeches ought to be applied at some distance, and on parts which are not likely to have the pus flow over them: the wounds ought then to be guarded by compresses dipped in the decoct. alb. until they are perfectly cicatrized. In these cases, complicated with inflammation, the greatest advantage is to be derived from dressings of emollient and narcotic decoctions, bread and milk cataplasms, and warm fomentations with mucilaginous or gelatinous substances. The diet ought to be proportionate to the general state of the health and the local affection, at the same time absolute rest must be observed. If these chancres be accompanied with much pain, which may exist with or without much inflammation, opiates must be employed locally or internally. The local application I generally use is an infusion of opium.

In this case, too, the cauterization with arg. nitr. forms a potent auxiliary. It is frequently the most efficacious sedative and certain antiphlogistic which can be applied, and often the patients themselves

earnestly desire its re-application. The acute pain it excites at the moment of its being applied, soon abates, and gives place to an improvement, which is sought in vain from other applications. To this rule there are but few exceptions, where these combined means must instantly be discontinued, and recourse be had to dressings with fatty substances, and more particularly with *cerat. opii*.

The phagedænic chancre may, however, progress or remain stationary. In these cases, where the cause cannot be discovered, sometimes cataplasms made with carrots, melted wax, or ung. digestiv. have been found to succeed. The most powerful caustics have been employed, also the actual cautery. I have found the Vienna paste, and far less violent applications, beneficial, as for instance, blisters and powdered cantharides.

Whenever, notwithstanding the use of the nitrate of silver, emollients, antiphlogistic narcotics, or dressing with wine, the chancre continues to progress, or remains stationary, I employ the following treatment:—If the ulcer be entirely uncovered, I apply a blister to it, or sprinkle it with cantharides; if on the other hand, it be deep seated, or has succeeded a virulent bubo, whose cavity it occupies, if the undermined edges of the skin be sufficiently thick, I have in this case also had recourse to blisters, and at the same time introduce powdered cantharides into the suppurating cavity; this dressing is then allowed to remain twenty-four hours: on the following day, fine lint dipped in aromatic wine is applied and renewed, as in the case of simple chancres. Under this treatment, the ulcer soon becomes clean, and healthy granulation appears; thus the cavity becomes filled, and the skin again adherent. Sometimes it may be necessary to repeat the application of the blister and cantharides; the former will only be used when its object was not attained and as soon as the first has healed; but the powder will be renewed every three or four days, until granulations appear. Should this treatment not succeed, I prefer the application of the Vienna paste as a cautery, followed by such dressings as may be required by the state of the local affection.

Frequently in this kind of phagedænic chancre, the edges are so much undermined, and become so thin, that it would only be a loss of time to attempt to procure a re-union. When an ulceration has succeeded an abscess, the skin may have become thin and undermined merely from the pus remaining under it, and without the wound having assumed a phagedænic character; or it may, on the other hand, have undergone this variation. In the first case, whatever may be the extent of the integuments to be removed, I prefer the curved scissors to give them the form most adapted for cicatrization; but, in the second case, nothing can be more hurtful than the use of a sharp cutting instrument, which, far from limiting the affection, aggravates and augments it; unless the new-made wound be immediately cauterized; therefore it would be far better in this case merely to have recourse to the use of caustic. Here, also, I prefer the Vienna paste, for not only can we define the parts we wish to remove, but we may at

the same time completely destroy the virulent surface, or, at any rate, protect the new edges of the ulcer from a too rapid inoculation, by interposing an eschar and by a kind of vital reaction, the absence of which is frequently one of the principal causes of the progress of the ulcer.

In most cases of these affections, mercury, sudorifics, &c. are more prejudicial than useful: there are, however, instances in which they have produced good results; but we are at present unable to indicate the precise circumstances in which mercury is useful, or even indispensable. If the disease progress, notwithstanding the means pointed out above, I have then recourse to this medicament, which was so long and often considered as specific; first, in local applications, and then as a general agent internally, or by the skin, according to circumstances, which I shall afterwards describe. I continue the local or general use separately or combined, according to the effects obtained, if there be improvement; but if the disease increase, I suspend them. As regards the other so called anti-syphilitics, they may be employed where general tonics are required, or those which act particularly upon the digestive canal, skin, urinary organs, &c.

B. *Indurated phagedænic chancres.* Induration, one of the essential characters of the Hunterian chancre, is a condition which must never be lost sight of in determining the treatment; for though these chancres can be cured by a host of means, and often heal without any treatment at all, yet frequently the induration remains, and we know what may then happen; most frequently the induration having a tendency to increase, not only prevents the formation of the cicatrix, but may, by the interstitial compression it causes, produce gangrene, and give the ulcer a phagedænic form. As in the case there is generally little inflammation or pain, our efforts must generally be against the induration.

In the most simple cases of indolent indurated chancres, the dressings ought two or three times a-day to be renewed with fine lint and a thin layer of calomel and opium, or mercurial cerat. Should the suppuration be too great, a lotion of vin. arom. may be applied each time the dressings are renewed; if that be not sufficient, the dressing may consist of the wine alone. When there is much nervous irritability and inflammation, or if the gangrene progresses, a concentrated solution of opium should be preferred, till the affection be brought back to the simple state, by means of emollients and antiphlogistics simultaneously employed. In indurated chancres of small extent, cauterization, which cannot go beyond the limits of the affection, is much less efficacious than in other circumstances; but yet the nitrate of silver finds its application here also; it modifies the surface, often arrests the progress of the gangrene, and during the reparatory stage, checks the granulations which have sometimes a tendency to become spongy.

Whatever may have been the form at the commencement and the seat of the chancre, the induration may remain after the cicatrization,

and being generally a sign of future symptoms, requires peculiar attention. Delpech and others have advised the excision. Sometimes the result may have been happy, but too frequently, it has been the cause of a fresh venereal ulcer upon the operated spot, therefore it could only be had recourse to where its extent was small and defined, or when the induration had undergone a sort of cartilaginous transformation, independent of the specific cause, and which has rendered it a kind of foreign body adhering to the mucous membranes or skin, but often moveable in the subjacent cellular tissue.

As regards the mercurial ointments used to remove the induration after cicatrization, if they sometimes succeed upon the skin, there are circumstances in which, when applied to the mucous membranes, they generally produce irritation and return of the ulcerative period, especially if rancid ointment happen to be used.

When the induration occupies a great extent, other means may be used with advantage. Caustics which act in the depth, the dissection of the indurated parts, and then the combined use of blisters, dressed with ung. hydrarg. and compression. Unfortunately, this powerful agent is not always applicable, as we shall afterwards see, it is only in those indurations, which accompany or follow buboes, that we can really draw advantage; for in those which are seated on the genital organs, and especially on the mucous membranes, we cannot take advantage of its beneficial influence.

If a well directed local treatment often produces a complete cure, it requires a long time. The difficulty of radically curing an indurated chancre by ordinary means, and the good effects of mercurials in its treatment, have been the principal arguments, which have caused it to be considered the sole type of primary syphilis, and mercury as the only specific to be opposed to it.

Without entering into a discussion, which would carry me beyond the limits which I have prescribed myself, I shall merely state, that if mercury has not incontestibly a specific action in this particular form of chancre, *it is at least one of the most powerful agents that can be opposed to it*, and hitherto we have discovered no medicament, which works a more rapid cure.

If the cure of a chancre be reckoned from the day of its cicatrization, without regarding what remains, it will sometimes appear more rapid with simple treatment; but if we wait, before we pronounce a patient cured, till all induration has disappeared, there will be a great difference in favor of the mercurial treatment; the induration in the first case remaining a very long time, and even *till the more frequent production of secondary symptoms*. Although I acknowledge the perhaps analogous properties of other medicaments, the mercurial treatment being one of the most powerful and certain, I have recourse to it whenever a certain degree of induration accompanies a chancre, and prevents it from cicatrizing, or remains after it is superficially healed, and more especially when, by its excess, it gives it a phagedænic form.

As injurious as mercury is in other varieties, so beneficial is it in this case.

C. *Gangrenous phagedænic chancre from excess of inflammation.* Here the inflammation, which gives the peculiar form to this variety of chancre, is the principal point against which we must direct the treatment, disregarding for a moment the primary cause; the worst results ensue from want of attention to this fact, and an empirical treatment of the specific cause with mercury. If however, notwithstanding a rational and judicious treatment, gangrene supervene, it must be treated as in ordinary cases unconnected with syphilis; only when this symptom has disappeared, is other medication indicated, and the chancre will have returned to the state of a simple ulcer, which the means already pointed out, will rapidly cause to cicatrize.

SECTION II.—BUBOES.

Wherever, and at whatever depth a bubo may be seated at the time of its appearance, when only a slight tension of the tissues exists, rest, which may be regarded as the best prophylactic, and a methodic compression as great as possible, without causing pain, suffice in most cases to prevent the development of the affection, especially when it has not been preceded by a chancre. I have very frequently observed, that in individuals who wear well made bandages for hernia, that the buboes are seldom developed on the side of this compressing apparatus.

When compression cannot be endured, or when nevertheless the tumor increases, we must have recourse to another abortive method, as avoiding the suppuration is of the greatest consequence. If the naissant bubo be not actually the seat of a very decided phlegmonous action, and have been preceded by a chancre, I prefer the following treatment. I cover the tumor with a blister; when it has taken effect, I remove the epidermis, and place upon the denuded skin a bit of lint, dipped in a solution of corrosive sublimate, twenty grains to the ounce of distilled water; this is allowed to remain two or three hours, if required, it can be secured by strips of plaster. This caustic application, for which a solution of sulphate of copper, two or three drachms to the ounce may be substituted, is not equally supported by all patients, some not being able to endure it more than an hour, on account of the pain it excites. To obtain the desired effect, an eschar must be produced, penetrating part of the dermis. This eschar, generally of a greyish or brown color, and but seldom black, is generally thicker than the part of the skin destroyed, which seems at first to become infiltrated, and then to receive an additional layer of plastic lymph. As soon as the eschar is formed, I cover the parts with an opiated cataplasm for the first day, and on the following I substitute compresses imbibed with cold decoct. aib. and continue them till the eschar falls off; the simple ulcer which then remains is dressed with perforated linen cloth covered with cerate, and over this the decoction

is continued. I have not found it advantageous to maintain the suppuration when it was desired to annihilate the affection of which we are speaking. I continue this treatment, repeating the application of blisters and the caustic solution as long as the tumor remains, unless acute inflammatory symptoms appear.

As the treatment with blisters and caustic solution has the inconvenience of producing great pain, and in some individuals an indelible cicatrix, it must only be had recourse to when a chancre has preceded, and the development of a virulent bubo is feared. When the engorgement is consequent on a simple gonorrhœa, a non-specific excoriation, or is spontaneously developed, as in all these cases there is little tendency to suppuration, we must employ milder resolutives—compresses dipped in decoct. alb., solution of sal ammoniac, emplastrum de vigo, iodide of lead, with conium, simple cataplasms, absolute rest, and, when pain exists, local depletions by means of leeches, and emollients with sedatives and narcotics, especially laudanum, freely applied. By these means many simple engorgements, situated near parts primarily affected with non-virulent symptoms, disappear soon after their commencement.

When the abortive method cannot be employed, the treatment must be determined by the acute or indolent state of the bubo, without regarding the variety.

If the local inflammatory symptoms cause a rather intense fibrile action in a robust individual, general and local depletion must be had recourse to; otherwise leeches alone will suffice, but too many ought to be applied rather than too few—twenty; thirty, or forty. In applying leeches, we must not lose sight of the possibility of suppuration, and when there is ground to believe a ganglionic chancre or virulent bubo exists, there must be applied around the base of the tumor; if the danger of suppuration be eminent, they must be applied at a still greater distance. To the use of leeches, must be added general warm baths, emollient cataplasms, rest in a horizontal position, taking care to give the limb on the affected side a slight flexion to diminish the tension of the aponeuroses, particularly when the buboes are deep seated. Low diet, cooling beverage, and saline purgatives, will be found very beneficial. Sometimes the leech-bites become irritated, and also cause an erysipelas, which is not always without benefit in indolent buboes; but in acute buboes, especially where there is a phlegmonous tendency or complication, greatly aggravates the disease. In this case, as soon as the skin becomes the seat of redness and pain, mercurial ointment, applied once or twice a-day, so as to cover the erysipelatous surface, will suffice to remove this symptom by acting upon the deep seated inflammation. It will sometimes be found, that poultices of linseed meal, produce an eczematous eruption, in which case bread must be substituted.

When the inflammation has yielded to the applications of leeches, and the tumor has not suppurated, the treatment must be the same as in the case of indolent buboes.

Whether the bubo has been primarily indolent, or becomes so after having been acute, in order to avoid giving unnecessary pain, we must commence by the most gentle resolatives. Although rest ought to be considered as of the first importance, if the patient be obliged to walk, the tumor should, during the day, be covered with empl. de vigo. c. hydrarg. care having been taken to shave the skin; in the evening, the plaster must be removed, and half a drachm of ung. hydrarg. well rubbed in, and then covered with a cataplasm, if there be any pain; or the compression may be applied either by means of a spica bandage and graduated compresses, a strong hernia truss, or an instrument contrived for this purpose.

If the gums become affected by the mercurial frictions, the ung. pot. hydroid. may be substituted, alone or with iodine. If either the mercurial plaster or ointment has been used, the skin must be well cleaned before the iodide of the potass ointment is applied, as otherwise a new and very caustic composition will be formed, which may cause considerable inflammation and excoriations. In cases of very indolent engorgements which require exciting, the combined use of mercurial and iodide of potass ointment is very beneficial, and they are more efficient than croton oil or emetic tartar, which have been proposed.

When the engorgement resists these means, or if a more energetic and expeditious treatment be desired, blisters and the caustic solution will be found by far the most rapid in their action.

In this case, as in the abortive method, the tumor must be covered with a blister, and, twenty-four hours later, lint dipped in a solution of corrosive sublimate applied. When the eschar is formed, it is to be treated with mercurial ointment, covered with cataplasms, and the suppuration must be maintained after the eschar is removed, by being touched every two or three days with the sublimate. Should it however cicatrize, fresh blisters are to be applied, and this treatment continued till the tumor has entirely disappeared, or till pus is formed.

Sometimes, however, it occurs, that after having been pretty rapid, the progress of the resolution is arrested, notwithstanding the continuation of the treatment. Then if the suppurating points be not too painful, the mercurial ointment being still continued, the tumor must be covered with compresses, dipped in decoct. alb. and compression applied. In many cases, a cure which is otherwise impossible, is obtained by employing these means alternately.

Whatever may be done, some engorgements do not yield, particularly those seated in the deeper ganglions. In some happily rare cases, there is a schirrous or carcinomatous degeneration, into whose history and treatment we cannot now enter; but most frequently the obstinate engorgements and indurations depend on scrofula.

Buboes of a scrofulous nature, or whose scrofulous complications have been excited into development by venereal affections, when treated with alkaline and sulphur baths alternately every other day, united with the preceding means, and the general treatment, which we shall soon point out, often come to a successful termination, which must

only be waited for with patience. In this case, the crushing of the ganglions might, as a last resource, be attempted, as M. Malgaigne has proposed. I have sometimes succeeded by applying every second or third day, a little tincture of iodine, which may be diluted with water, when it irritates too much or excoriates.

In some cases, the excision or extirpation of the ganglions would seem to be the only method; but as the operation is not always easy or even practicable, I have found it better to destroy a third of the skin, which covers it, with the Pate de Vienne (a very thin layer will suffice). If the eschar is removed, the thus denuded ganglions, are to be covered with ung. hydrarg. and cataplasms; the successful result is often very rapidly obtained. If we are obliged to attack the ganglions themselves, with the paste, we must be very cautious in its application, and only remove very thin layers at a time, redoubling the precaution the nearer the more important parts are approached.

When the induration of the bubo is dependant on that of chancre, we must pursue the treatment recommended for indurated chancre.

Acute and indolent buboes may terminate in suppuration, which is more frequently the case when a chancre is the cause. If much inflammation accompany the suppuration, leeches and antiphlogistic treatment is required. If local depletion does not in all cases produce the resorption of the pus, at least it has the advantage of checking the phlegmonous process, and further development of the abscess. When the inflammatory symptoms are subdued, a question of great importance presents itself to our consideration. Ought we in all cases to attempt the resorption of the pus to avoid opening the abscess, or is it better to give it an issue as soon as it is formed? It has been asserted, that by employing certain methods of treatment, the spontaneous or artificial opening of the greater number of buboes might be avoided, of whatever nature they may be; but I can affirm, that when pus is decidedly formed, whatever may be done, resorption takes place but in a very few cases, and that, if it be attempted to procure it, there is great risk of serious consequences. Blisters and the caustic lotion, which are so advantageous before the suppuration has taken place, may still, if the cavity be of little extent without the skin having become thin, and the buboes not virulent, produce a complete resolution without opening; but should the suppuration be copious, the cavity considerable, the skin thin, and deprived of its cellular tissue, in which case the solution no longer produces that thickening, which was previously mentioned, this treatment does not prevent the abscess from opening, and far from inducing the absorption of the pus; it favors its escape through the eschar which it produces, and that often by a number of holes like a sieve, which has led to the belief that it is only a simple purulent perspiration.

If however, this result were the most frequent, by favoring the reunion of the skin, with the subjacent parts as the pus is evacuated, the method would still be favorable; but unfortunately this is not the case, and whilst this treatment is employed, the cavity extends, the pus accumulates, the skin becomes undermined, till the eschar falls,

and then it may not be of sufficient depth to allow of the complete evacuation of the pus.

From observation, I have been induced to adopt and recommend the following treatment: whatever may have been the treatment previously employed, as soon as we are assured of the existence of pus, we must give it issue. It is not necessary to enter into a description of the signs which denote suppuration, but I must mention that the elastic tension of the ganglions often deceive, and lead to a belief in the presence of pus, where in reality none exists. Sometimes the suppuration is deep-seated, and enveloped in indurated masses, which mask it and prevent its detection; yet if the tumors in which the presence of pus is suspected be carefully examined, a point will often be found, generally on the most prominent part of their surface, soft and fluctuating, and, being pressed, the pus is forced through a kind of indurated ring which forms a communicating passage with the deeper parts. We are sometimes astonished upon opening these buboes to see an enormous quantity of pus escape, when the fluctuation had only indicated the existence of a few drops.

In every case, the opening ought to be made in the direction of the greatest diameter of buboes. In the inguino-crural region, in the direction of the plica; the vertical ganglions of the thigh ought to be opened in the direction of the axis of the limb. The incisions made according to these rules do not expose so much to consecutive collections of pus and the necessity of subsequent crucial incisions.

When the cavity is of little extent and the skin but slightly changed, a small puncture will suffice; otherwise a large incision ought to be made in the undermined skin. If at the time of making the incision the skin is threatened with gangrene, or becomes thin and blueish, it is incapable of being re-united or cicatrizing, and must, therefore, be destroyed. For this purpose either a bistoury or curved scissors may be used; but I prefer the *Pate de Vienne*, with which we can remove as much as we desire: not only do we by these means remove the useless parts, but also, as we said when treating of phagedænic chancres, a healthy inflammation is excited in those which remain, and in virulent buboes a prompt neutralization. It ought to be understood, that if we have to do with a gangrenous bubo with excessive inflammation, we must first have recourse to antiphlogistics, an incision, and the indications which gangrene in general presents.

After opening the bubo it is useless to press out the pus, which causes great pain; fomentations and cataplasms must be applied, and only in case of a small opening, and a non-virulent bubo, is a bit of lint between the lips of the wound necessary, during the first few days.

In simple buboes every thing goes on as in ordinary or scrofulous abscesses; but in some particular cases, as especially where there is a ganglionic chancre, the edges of the incision ulcerate, the cavity continues to extend or at least remains stationary. Then after the second day, from the time of the bubo being opened, I fill the cavity with powdered cantharides and cover the whole with a blister. The next

day, if any induration be present, I apply ung. hydrarg. and dress the cavity with the aromatic wine; otherwise I dress the surface of the blister with cerate and cover it with compresses dipped in decoct. alb. continuing the wine for the cavity.

The treatment of virulent buboes, after they are laid open, is the same as that of chancres.

We may add, that where the opening has existed some time, as in those fresh made, all the portions of skin which are too much changed ought to be destroyed, and all fistulous canals and accumulations of pus, laid open. Detergent irritating injections, which so often succeed in cases of simple fistules, are little to be depended upon in virulent buboes; compression in the regions in which the pus is situated, is scarce more advantageous, as surfaces affected with virulent ulcers cannot unite, and the parts ought in such cases to be exposed.

In all cases when the granulation is tardy and slow, powdered cantharides, placed in the cavity and covered with dry lint, excites the production of granulations, which when excessive or atonic ought to be cauterized, or stimulated with nitrate of silver, as every wound which is cicatrizing. Should afterwards any induration remain, the treatment which we have pointed out for this circumstance must be employed.

If the local treatment of buboes is of the first importance, the general treatment ought not to be neglected.

The acute stage requires, as we have said, antiphlogistic treatment proportionate to the degree of the disease and strength of the subject; but when these indications are attended to, others of not less importance, present themselves. The lymphatic habit and scrofulous complication being very frequently met with in individuals affected with buboes, we must use bitters and tonics, and when no contra indication exists, they ought to be combined with a strengthening regimen, particularly when the system is much exhausted by copious secretion of pus. In these cases, I have derived great benefit from the use of protochloride of iron, in doses of ten, twelve to twenty grains per diem, with a decoction of hops or sapornaria and syrup of gentian.

As regards the antisyphilitic treatment, properly so called, the presence of a bubo is no more indication for it than a chancre; it is only required in certain conditions and then frictions seem to be preferable, perhaps as being more direct.

Sometimes buboes are complicated with scurvy, hospital gangrene, hæmorrhage, fever from resorptions, &c. but we cannot here enter into a detailed examination of these symptoms.

CONSTITUTIONAL SYPHILIS.

GENERAL REMARKS.

From the foregoing considerations, we have seen that we possess

an infallible criterion by which we can distinguish and diagnose the primary symptom of syphilis, but this is not the case with regard to those resulting from general infection. The well characterized and recognized antecedent in the absence of any other appreciable cause; the form in each case; the peculiar progress; the concomitants, and the results of certain treatment, generally lead to a rational, but often doubtful diagnosis when symptoms are concerned, which other causes than syphilis can produce or considerably modify, such as certain cutaneous, glandular or osseous affections, &c. However, if the diagnosis be not always possible, there are yet many affections about which there can be no doubt. For instance, it is impossible to mistake a mucous tubercle after having once seen it, if well defined. Are there any circumstances unconnected with the syphilitic virus which can produce it? Is there any treatment, which acts more powerfully upon it than the mercurial; and of all the hereditary symptoms, is it not, with the lenticular eruption, of the most frequent occurrence?

However they may have explained them by the action of the syphilitic virus, or by the doctrine of the sympathies, all writers on syphilis are agreed, that the primary venereal affections may give rise to consecutive lesions of the various tissues of the system, but more especially of the skin, the mucous membranes of certain parts, the cellular tissues, lymphatic, fibrous, osseous system, &c. of the eyes, testicles, &c.

Except by inheritance, there is no primary constitutional syphilis; in those cases which have been thought such, the primary affections had escaped notice, as is frequently the case in women; or had been concealed by the patients, under circumstances, in which it would have been dangerous for them to have acknowledged them, which, in order to avoid being deceived, ought always to be borne in mind, particularly in cases of nurses.

I shall now proceed to consider, whether there exists a really prophylactic treatment for the symptoms of general infection.

SECTION I.—PROPHYLACTIC TREATMENT.

The cure of primary affections, which are generally of little extent, and most frequently of little severity, has at all times been the least important question to decide. Whoever will give themselves the trouble to observe, will find, as we before stated, that it may be spontaneous, or take place under the influence of a host of medications to which no specific properties can be attributed; but a patient who is cured of an indurated chancre is far from being in all cases freed from syphilis. In the treatment of the symptoms with which syphilis commences, our endeavor must be to prevent the consecutive (secondary or tertiary) affections. I have stated, from examination of various authors, and more particularly from personal experience, that I do not know of a single instance in which the primary symptom having been destroyed, before the fifth day of its real existence, symptoms of con-

stitutional infection appeared. I can firmly assert, that as soon as every one is convinced of this fact, syphilis will cease to make the ravages to which it is urged by opposite doctrines. Let every erosion or solution of continuity, which appears after a coition, be destroyed, not only where the connection is of a suspicious nature, but in every case; for this symptom is unfortunately overlooked by the greater number of patients, whom horrible consequences too frequently undeceive when it is too late, and under circumstances in which the moral and social position would seem to protect from every chance of infection.

As however in most cases, the primary symptom is allowed to progress, and the patients only apply for advice at a later period, the chances of destroying this symptom before absorption has been allowed to take place, diminish, if not in regular proportion to its duration, at least in proportion to the specific induration with which it may be accompanied.

I can most positively affirm, that contrary to an opinion professed by many, and by Dupuytren in particular, that the destruction of chancres by caustic or other local application cannot be regarded as favoring the development of constitutional affections by the repercussion, or throwing of the virus into the system; all we can say is, that when cauterization has been had recourse to too late, it cannot prevent the general infection.

The result of my experience in the vast and fertile field of the Hôpital des Vénériens, has taught me that in general the best prophylactic measure against the constitutional symptom, is the radical cure of the primary affection in the shortest possible time and without leaving any induration, and that whatever method of treatment has been employed, the induration which remains, after a mercurial or other treatment, leaves the patient nearly certainly exposed to secondary affections.

But is there any treatment which, beside the specific cause, the peculiar poison, favors the development of the syphilitic habit and diathesis? Yes, and it is that which does not destroy the virus and radically cure the primary affection. Thus it is not more mercury than sudorifics or antiphlogistics, but the medication having been injudiciously or insufficiently administered. Mercury has not only been accused of aiding the production of constitutional symptoms, but some inconsiderate enthusiasts, carried away by the love of novelty, have even asserted, that mercury was the sole cause of all the frightful affections which syphilis produces. If indeed syphilis was of rare occurrence; if it were with us, as the oriental plague, of which many write without ever having seen it, there might be some excuse for these paradoxical propositions; but as it is to be met in our streets and fills our hospitals, to refuse to see is voluntarily to forego the use of one of the senses which ought then not to be appealed to in making other observations. To convince me that mercury can produce the bad effects which are imputed to it, I must be shown a subject, who, under its in-

fluence alone, and without having had any specific antecedents, has afterwards been attacked with mucous tubercles or lenticular eruption. Such a proof must be easy to furnish, if this medicament could alone cause such symptoms; for it is every day administered in every form, in cases unconnected with syphilis. Amongst the numerous persons affected with gonorrhœa, and who were formerly treated with mercury, as is still the case with some surgeons, how many have been found later to present constitutional symptoms, beside those who have had urethral or concealed chancres? If, on the other hand, the actual population above the age of fifty were interrogated; we should be astonished at the number of persons who have, under the influence of the old doctrines, undergone mercurial treatment, without ever having experienced anything of it. This number is indeed so large, that the amount would appear exaggerated, unless we were able to have it actually verified by the individuals.

We undoubtedly see every day the most severe cases of syphilis, in patients who have most of them used mercury; but have the explanations always been free from prejudice? Do we not generally find, that those patients who are stated to have used a mercurial treatment, have not undergone any influence from it, either from the form in which it was administered, having only had a purgative action, or that the pills being in a manner petrified, like those formerly used in the *Hôpital des Vénériens*, passed through the digestive canal, without losing an atom of their substance. Would it then not be more rational to say, that there are some patients with whom the treatment has been insufficient or badly administered? Is this not proved by the successful issue of a more methodic treatment of these same individuals? Are not others completely refractory to any treatment? Do we not also find, that all forms of constitutional syphilis do not yield to the same treatment, more than it can in every case prevent their development? and lastly, that in some individuals, the most unfortunate of all, but incontestably the least numerous, the disease develops itself nevertheless, and becomes the more formidable as the remedy cannot arrest it, and undermines the constitution? These latter circumstances have undoubtedly been better understood of late, and much credit is due to those who have aided the researches by their works, as Thomas Rose, Guthrie, Rust, Brumminghausen, Richond, Jourdan, Devergie, Desruelles, Fricke, &c. although some of them may have somewhat exaggerated the circumstances they observed.

The numerous observations which I have been enabled to make, lead me rather to consider a mercurial treatment as curative of certain symptoms than prophylactic.

The surgeon who leaves an indurated chancre without general treatment, is in a measure responsible for the consecutive symptoms, and mercury is by far the most prompt and efficacious in its action. If a mercurial treatment be indicated, it ought to be pursued till the symptoms disappear.

Whilst speaking of the prophylaxy we ought to mention, that all

persons are not susceptible of general infection, a fact which has been overlooked by many writers; that peculiar conditions are required for it to take place, and that especially after the infection has taken place, in order that its material manifestation may be effected, certain accidental or rather assisting circumstances are requisite, which may be tardy in their appearance, or altogether wanting.

Thus a sudden change from a mild to an exciting, or from a tonic to a debilitating diet, change of climate, &c. favor its development. The same is the case in the change from *foetal* to extra-uterine life; from pregnancy and from the time of the cessation of the menses, which has been so well observed by Thiéry de Hery. The same influence results from a disordered state of the digestive canal, anterior or concomitant cutaneous affections, habitual irritations of the throat and mucous membrane of the mouth, frequently owing to the use of a pipe irritated *hæmorrhoides*, *scrofula*, or other diathesis. Further, a blow, a fall, want of cleanliness, and over exertion of certain parts, produce the same effects.

From the preceding general views, into whose details we will not enter, results as the most prominent point, that to prevent further consequences, attention ought to be paid to the general health and proper action of the functions and to the rational treatment of any concomitant diseases not dependant on syphilis.

SECTION II.—SECONDARY AND TERTIARY AFFECTIONS.

All the consecutive affections of chancre may, like the chancre itself, heal spontaneously, often without any cause being perceived; at other times, in consequence of certain more or less apparent conditions, such as accidental perspirations, change of diet, climate, or occupation, the critical termination of concomitant diseases, &c. But although many curious observations of this kind have been made, it must be confessed that these cases are rare, and that of all diseases, constitutional syphilis is perhaps the one which most decidedly requires the aid of art.

If difference of opinion exists as to the treatment required by the primary symptoms, there is still greater as regards that of confirmed syphilis. The following is the result of my clinical experience, and the treatment it has led me to adopt.

1. *Time at which the treatment ought to commence.* The first symptoms which make their appearance after a chancre, ought to be treated as promptly as possible. The serious nature of syphilis depends only on the time allowed it to undermine the system.

2. *Conditions.* Neither any age nor habit is an absolute contra-indication.

As regards women, the period of gestation, far from being an obstacle to energetic means being adopted, requires yet more attention and judicious promptitude. I have seen more abortions in syphilitic women who were not treated than in those who had been timely submit-

ted to a methodic medication. The same is the case during the period of suckling.

3. *Climate. Seasons.* Climates and seasons are never absolute impediments; undoubtedly a temperate climate and warm season are preferable; but yet under opposite circumstances, when the symptoms are urgent, an immediate treatment is preferable to delay.

4. *Syphilis without complication.* When constitutional syphilis exists in an uncomplicated state and at its commencement in an individual enjoying a good constitution, and who has never been tormented with injudicious treatment, its cure is generally easy and rapid.

5. *Syphilis with complications.* When constitutional syphilis is complicated, its complications ought never to be neglected; if they be acute affections of some importance, their treatment ought first to be attended to, so as to reduce the syphilis to the most simple form; the same is the case when new primary syphilitic symptoms have been acquired. When the affections are of a slow chronic nature as some diseases of the skin, scrofula, organic affections, &c. the syphilis must be attacked, if its treatment does not aggravate the concomitant disease, which must be attended to at the same time.

In short, the most prominent symptom, whatever it be, must be first attended to without neglecting any points, which may furnish a therapeutical indication.

The exclusive treatments which regard only a single symptom, whilst there may be many which require to be modified, are the worst which can be pursued, to whatever system they may belong.

6. *Antiphlogistic treatment.* In like manner antiphlogosis ought to be considered as the principal means to be employed, whenever any symptoms of super-excitation and particularly inflammation exist. There can be no certainty of success without strict regard being paid to this rule. Whatever the nature of the affection may be, if inflammation be present, the antiphlogistic method must first be used according to the seat, extent, local intensity, and sympathetic reaction. But dangerous as it is to neglect this precept, it is equally so to pursue it as an absolute and curative method in all cases. Doubtless thousands of symptoms of a reputed syphilitic nature may be found which have yielded to it; but the true symptoms of general infection, whose complications it may modify, resist it and then constitute those particular cases, which the advocates of this doctrine treat, as we do, by a more powerful and certain medication.

7. *Diet.* So great is the influence of diet upon the diseases of which we are treating, that it has induced some to make a special treatment of it, under the name of *cura famis*. The observations I have made have taught me, that whenever the subject affected with irritable inflammatory venereal symptoms is robust and vigorous, a spare diet will produce a happy modification, and cause a number of symptoms, which are not dependant on the syphilitic virus, to disappear. But the privation from food, either in part or entirely according to the habit of the patient, applied without discrimination to all cases, is not-

withstanding the powerful authorities who support it, one of the worst means that can be adopted. Thus in a weak debilitated individual with a scrofulous habit, a spare diet aggravates the disease whilst a generous, tonic diet is a principal condition on which the success of the treatment depends. This assertion may be verified every day in the wards of my hospital, where patients who at home were destitute of every thing, will be found quickly to recover their strength and health under the influence of a better diet, whilst others, accustomed to plenty, droop and only become re-established by quitting the abode and nourishment of an hospital. The diet must therefore be regulated by the more or less inflammatory nature of the symptoms, strength of the subject, and particularly their former habits.

8. *Baths.* Are almost always of great assistance as sedatives and adapted to maintain the functions of the skin, so necessary in most affections, and especially in those which have their seat in the skin itself.

9. *Remarks upon the influence of the digestive canal.* If it be requisite in the treatment of secondary affections that the functions of the skin should be undisturbed, it is equally important that the digestive organs should be perfectly free. Without attributing to them supremacy of action in the economy and the arbitrary direction of the progress of syphilis, it is not to be denied that their influence is often immense and perhaps more particularly in the ulcerous forms and affections of the osseous and lymphatic symptoms.

10. *Sudorifics.* As a general medicament, sudorifics have been too much lauded, and there seem to be too many cases in their favor to allow of their curative influence being entirely denied. Without, however, fully adopting the views of Cullen, particularly as regards sarsaparilla, I must say that in well characterized constitutional symptoms, this substance or those which resemble it, are far from possessing all the power which has been attributed to them, and which commercial speculations have sought to maintain.

I must nevertheless say, that there are some indications to which this class of medicaments answer, and which render it useful in rational practice. Thus when the digestive organs are healthy, and too much general or local irritation does not exist, and the functions of the skin are defectively fulfilled, sudorifics produce good effects as adjuncta to the mercurial treatment. They are moreover indicated and very useful when circumstances forbid the use of mercury; when it has been injudiciously administered and has produced ill effects, or when its use has to be suspended. In the affections of the osseous system, and more particularly when suppuration exists, they are our sole if not active and curative resources, yet as a *moral* medication, on account of their common reputation, and the confidence most patients place in them.

Further, as regards the moral or mental treatment, if we may be allowed to employ the term, we must have recourse to sudorifics, for patients affected with *syphilophobia*, who being haunted by an idea of a syphilitic affection improperly treated, or as they express it badly

cured, believe themselves a prey to the most incongruous symptoms of which they really possess no trace; in such cases we may conscientiously do with these medicaments, giving them the name of correctives, depuratives, what it would not be allowable to do with mercurials.

Amongst the sudorifics, giving the first place to sarsaparilla, although it is not always certain, except from other diaphoretic indications, I greatly prefer the tisane de Feltz;* where not contra-indicated. I usually employ the form communicated by Boyer, who received it from the son of the author. Guaiacum, which is to be ranked third, has succeeded with me better in affections of the osseous system. As regards Zitmann's decoction, the results I have obtained from it, are far from equalling the wonders attributed to it, although it may sometimes succeed. I administer sudorifics in the form of tisane (diet drink,) when the circumstances of the patient allow of it; otherwise they must conceal their treatment, in the form of syrup.

Unless the patients keep in a temperature of from 14° to 16° C. the tisanes are to be given cold during the day, they then act upon the digestive canal and urinary organs. Towards evening and upon going to bed, they are to be given warm and in somewhat larger quantity. I have derived benefit from adding in these cases, a little acetate of ammonia.

11. *Tonics, antiscorbutics, &c.* According to the habit or the complications, tonics, antiscorbutics, or antiscrofulosæ ought never to be neglected; thus I administer either alone or combined with mercurials quinine, bitter and other extracts, iron and particularly the protiodide of iron, from which I have derived so much in the treatment of scrofula in its simple form or combined with syphilis, and also iodine, internally or locally, not, strictly speaking, as antisypilitic, but as a treatment for these frequent and troublesome complications.

12. *Remarks on other medicaments.* Before we come to the consideration of mercury, which has and still does, in spite of all that has been said against it, enjoy so just a celebrity, I must say a word upon some substances which it has been attempted to substitute for it.

In the study of the therapeutical history, it is very obvious that if a disinterested love of humanity and science has directed the labors of many, far more have been influenced by other motives. Each has desired a peculiar treatment, a nominal method, which might furnish a pretext for making a book, or publishing a prospectus.

I shall not pause to examine those means to which these reproaches may apply; I shall only relate what I have found from experience, concerning the preparations of gold and silver, &c.

I have always found gold as a general method in primary affections useless. In the consecutive constitutional affections, its effects are most uncertain; most of the symptoms reputed to have been cured by this medicine, are far from being incontestibly of syphilitic nature,

* See formulary at the end.

and where it has been administered in well characterized cases or where other methods, and especially mercury, had failed; it has not appeared to me proved, that it is not rather to the suspension of the medicine, which was in this case hurtful, that the cure is to be attributed.

Notwithstanding the encomiums which have been passed upon the treatment with gold by its author, and those who have imitated him, I only employ it when I have no other resource; but this is only my personal opinion, and I do not attack the interesting works which have been published upon this method.

All the preparations of silver have appeared to me, upon trial, according to the directions of Professor Serres, of Montpellier, far more uncertain, which all, who have attended my clinical practice, may have observed. In primary affections and confirmed syphilis, commencing with small doses and gradually increasing to the enormous dose of fourteen and sixteen grains per diem, I have obtained no result, but a derangement of the digestive organs, which obliged me to discontinue its use.

13. *Mercury*. We must then give a preference to mercurial treatment in confirmed syphilis, when not otherwise contradicted. Mercury is not an absolute specific, but it is the most certain and powerful remedy we yet possess, and it will, notwithstanding the objections which have been raised, maintain its rank, as a therapeutical agent.

The method of applying the mercurial treatment which I employ in my hospital and private practice, belongs to no exclusive system; the rules by which I am guided, are the result of observation.

Without in this place determining to which class of medicaments mercury ought to be referred, some of the effects which it produces are constant and incontestible, and must be admitted even by its greatest opponents. These effects are either pathological modifications, or curative results. But it must not be supposed that mercurials in invincible doses for all subjects, will always act; for there are some patients, who are until a certain point unassailable by their action. These propositions which are so simple, that it may seem almost absurd to state them, viz. that in some subjects, mercury is inert and in others hurtful, whilst in others it cures, have not always been acknowledged, and as a proof I may mention, the attacks which have laterally been made upon this powerful medicament.

Guided alone by clinical observation, and profiting by this simple and so practically useful condition, we must not conclude that a mercurial treatment has been unavailing, because it has been continued a long time, or repeated without results; we must not regard it as hurtful because being administered in doses, ill proportioned to the disease, or the patient, it may have produced momentary symptoms, nor must we require of it more than it can produce i. e. the cure of symptoms which may actually exist, and of those which may appear at a later period.

In order to obtain from this medicament the advantage which we have a right to expect, we must employ it in suitable doses, which, as we have before said, cannot be the same for all patients. The proportions of these doses for each individual, must be ascertained by gradually increasing them, until a favorable modification of the affection we are treating be obtained, or until symptoms arise which cause us to desist. These increasing doses, which are so necessary in many cases, have appeared to me still more so when it is done suddenly from a weak to a stronger dose, allowing an interval of five or six days, than when the increase was made daily and by an insensible gradation. From the foregoing it will easily be understood, that it is impossible precisely to fix the daily dose of the medicament, and that great difference of opinion may exist upon this subject. Moreover we must in some manner reckon upon the action of each separate dose, and not upon the total quantity taken, at least not in an absolute manner, and that one individual who may have swallowed a hundred grains of sublimate in small doses within a long period, will be less affected than another who has taken upon the whole a less quantity, but in doses better suited to his constitution and within a much shorter.

We must reduce to their proper value the symptoms which limit the doses, or require the temporary or entire of suspension of the medicament; thus one of the inconveniences of the mercurial treatment which is now pretty generally acknowledged, though formerly considered a favorable symptom, is its action on the mouth. Mercurial stomatitis (ptyalism or mercurial salivation) must be placed foremost amongst the bad effects which mercury produces. If in some rare and exceptional cases, we find the venereal symptoms improve under the influence, we see them more frequently aggravated, especially when they are situated in the cavity of the mouth, or at least in the greater number of cases, they remain stationary during the course of salivation.

If, as we have seen, salivation is useless in the cure, the progress of which it sometimes retards, and that it always constitutes a disease, if not most frequently serious, yet always very tedious and painful; the greatest care must be taken to avoid it, by discontinuing the use the agent which produces it, immediately the mouth becomes affected. The use of mercury must indeed be wholly suspended if the stomatitis is developed to allow this affection to subside, when we may return to the same treatment beginning with weaker doses, which may afterwards be greatly increased without producing salivation.

The tenderness of the mouth being in many cases the first sign of the patient receiving an impression from the medicament, and a scale by which to regulate the dose in practice, we ought to be able to take all possible advantage of it, and not be deceived by accidental affections unconnected with it. In order to do this, we must, before we commence a treatment, ascertain the state of this cavity, and take into consideration the bad dispositions which, if I may be allowed the expression, too soon excite the action of the medicament in it.

Next to stomatitis derangement of the stomach and intestines, are most frequently observed under the influence of mercury, especially when administered internally. Here too, taking the previous conditions into account, the doses must either be diminished or suspended according to the foregoing rules.

The same course must be pursued, in case of the rare and dubious hydrargyriasis or mercurial eczema, when it is not the result of a local action of the mercury in consequence of frictions; the like will be the case in the wandering pains, tremors, fever, and in short, every morbid symptom unconnected with syphilis; but which having been developed under the influence of the medicament would necessarily increase, if its use were continued. If the affection which mercury produces, serves to regulate its employment, its curative effects are a still better guide. Thus, as long as a dose amends the symptom treated, it should be adhered to, and only augmented when its efficacy ceases.

The preparation to which I now give the preference, not only in the treatment of the secondary symptoms, but also of the primary, is the protiodide of mercury, commencing with a single grain in the form of pills.

In some patients, the daily dose has been increased to six grains, and the total quantity sometimes to two hundred, by its being continued till the complete disappearance of the symptoms. My experience has led me to the following conclusion, that the most powerful way of action was by the intestinal canal, and that the application by the skin was far inferior, and ought only to be employed when the bad state of the digestive organs will not allow of the direct introduction of the medicament.

In giving however the preference to the protiodide of mercury, I ought not, without entering into details foreign to the limits of this work, to omit that there are some cases in which the form in which mercury is administered ought to be changed, when that first employed either without effect or produces inconvenience.

13. *Opium*. Opium, which some have placed amongst the specifics in venereal diseases, is of the greatest utility in their treatment. Its employment is indicated whenever the nervous symptoms are prominent amongst those we have to treat. The extreme irritability of any organ in particular or of the system in general, and pain, either the cause or the product of inflammation, often requires it, either as sole medicament or as adjuvans. We find the use of opium peculiarly required during the employment of mercury, to enable the digestive canal to support it, when it has without it been incapable of bearing it. Opium corrects the tendency mercury has to purge, and prevents colic and the griping in the stomach, which some patients feel, particularly in using sublimate.

Its effects, as regards salivation, are not so well ascertained. Its direct action on the mouth is perhaps rather to repress the salivation, or at least to allay the pains which accompany it; but in the digestive canal, by frequently producing constipation, it incontestibly predis-

poses to it, a circumstance which deserves the greatest consideration. As a corrigens, opium is advantageously employed in removing, or even preventing, the tremors which are sometimes observed after the use of mercury.

In a word, opium employed in its various forms, either locally or generally, alone or combined with other methods of treatment, ought never to be neglected.

SECTION III.—APPLICATION OF THE GENERAL PRECEPTS TO PARTICULAR CASES.

SPECIAL TREATMENT OF SECONDARY AFFECTIONS.

Syphiloids. Cutaneous eruptions are the most frequent symptoms of constitutional syphilis, and appear the soonest after the primary affection, or when inherited, after birth. These eruptions, which are seated on the skin and certain regions of the mucous membranes, seldom occur before the fourteenth day after the appearance of a chancre, and do not develop themselves generally till after the fourth, fifth, or sixth week, or even later.

The forms under which the syphilitic eruptions show themselves, are all those which have been admitted in the general classification of the diseases of the skin. But the specific cause of all of them being the same, the differences are only owing to the duration of the eruption, the period at which it occurred, the seat it occupies, and the influence which concomitant diseases may exercise over it, the habit of the patient, and the treatment to which he may be subjected.

The progress of syphilitic eruptions is generally chronic, and the time of their duration difficult to determine. They may terminate by delitescence or sudden disappearance, whilst they are still in the period of roseola, or simple maculæ; by a gradual resolution; by suppuration when they give rise to the formation of pustules, which may be followed by ulceration; and lastly by indurated or ulcerated tubercles.

In the absence of other cause, we must refer to chancre or inheritance for a rational diagnosis; and in cases of lenticular, herpetiform syphiloid and mucous tubercle, to the peculiar appearance which no other affection without these antecedents ever presents. I may here be permitted, without entering into further details, to say that generally the dark coppery color, which is usually considered characteristic, only shows itself very late, and is only well defined in the spots which follow the cure of the forms which have attacked the skin more deeply, never leaving any trace upon the mucous membranes.

A venereal scabies does not exist. Syphilitic patients may most assuredly be affected with the itch, but the syphilitic virus cannot produce it.

When the syphilitic eruptions are accompanied, or preceded by fever or superexcitation, antiphlogistic treatment ought first to be em-

ployed; then recourse must be had to mercury, aided by antiphlogistics, if the irritation still exist, otherwise by sudorifics. If inflammation be still present, gelatinous baths are very useful; if the disease resist, especially in the simple eruptive period, or with formation of squama without ulceration, simple vapor baths; but fumigations with cinabar, are of a great assistance and efficacy.

In the squamous, or the pustulous forms without irritation, and when the crusts have dried and still adhere, as well as in the case of the production of tubercles in the period of secondary affections; the frictions recently recommended with ointment of protiodide of mercury have often proved successful, united with gelatinous baths. Here also in cases which resist, baths with sublimate, repeated every or every other day according to the effects produced as mercurial agents, are very often useful. In one form in particular, a cure is effected with an astonishing rapidity, I mean that of mucous tubercles or papulæ. Whatever its seat may be, at the same time as the general treatment, which it requires as a secondary symptom, is employed, the local medication, which from the rapidity of its result is truly specific, is as follows:—

The diseased parts are first to be washed, if they are not indurated, with pure chloride of sodium (chlorure d'oxyde de sodium,) and in the contrary cases, or where there is too much irritation, diluted with water, so as to excite a slight tingling without pain. Then after the washings, which are to be repeated twice a day, the diseased parts are to be sprinkled with calomel. Eight or ten days, suffice to cause enormous masses of these eruptions to disappear, which perhaps, situated between the toes, have for many months prevented the patients from walking. Those which are situated in the nostrils, on the internal surface of the lips or cheeks, on the edges of the tongue, the palate, tonsils, &c. must not be confounded with the superficial, spongy, and greyish ulcerations, which mercurials sometimes produce, and which always commence on the gums, and particularly the lower, and those of the last molar teeth. Besides the general treatment, which alone almost always suffices, and the local use of simple or mucilaginous gargles, sweetened with honey, cauterizations with liquid nitrate of mercury, which are less painful than on cutaneous tubercles, greatly accelerate the cure. In the acute pustulous period, with copious supuration, we must not be precipitate with the use of mercurials; we must first have recourse to sedatives and antiphlogistics, carefully examining what gives the syphiloid this form, which scarce ever is the sole product of syphilis. Only when all other indications have been fulfilled, ought the special treatment to commence.

Ulcers. When consecutive ulcers exist, having been preceded by one of the forms of which we have been treating, their peculiar state is referable to what we said elsewhere on chancre, which they resemble in many respects, especially as regards their treatment. We must here bear in mind, that many ulcers reputed syphilitic, may be maintained by conditions unconnected with syphilis, and which must by no means be neglected.

The ulcers which are seated in the throat, are either the consequence of mucous tubercles, or they assume the appearance of an indurated chancre, or follow the course of phagedænic gangrenous ulcers, from excess of inflammation. In the two first cases, which require mercurial treatment, gargles of decoctum malvæ, with corrosive sublimate will be found very beneficial; cauterization with nitrate of mercury, only succeeds in cases of mucous tubercles; it is less efficacious, when not injurious in cases of true indurated ulcer. In phagedænic ulcers, opiated gargles, and when the inflammation has abated, cauterization with hydrochloric acid, and gargles with quinine ought to be put in the foremost rank, reserving the general treatment in case other indications should afterwards require it.

When the uvula becomes ulcerated, it is often destroyed; when it is nearly detached, it should be removed instead of waiting till it drops; I have seen a patient nearly suffocated by its falling on the glottis whilst he was asleep. When the velum palatinum has been divided by syphilitic ulcers, the state of the tissues, and the nature of the cicatrices, either render the staphyloraphy useless or injurious.

In consequence of the ulceration of the mucous membrane of the palate and nose, the bones of the palate, the cartilages and bones of the nose are often exposed. From this exposure, may result otitis, terminating in caries, or even necrosis; but in this case, the disease of the bones is less acute, and terminates sooner and better than in the tertiary affections where it commences in the bones themselves.

Syphilitic irritis. Secondary syphilitic ophthalmia, most frequently accompanying the syphilitic eruptions of the skin. It seldom appears as isolated symptom, and frequently, though not always, presents a deformation of the pupil which becomes elliptic, or rather egg-shaped; the greater end being below, and its greater axis directed obliquely from the outer corner of the eye upwards and inwards, with alteration of the color of the iris, which sometimes presents excrescences on its pupilar margin and anterior surface; excrescences which have been regarded as true condylomata. Albuminous effusions often take place in the cameræ of the eye; they are either absorbed or form adhesions, which only restrict the movements of the pupil, or induce the formation of pseudo cataracts. The eye may, in ophthalmia, undergo all the alterations which occur in cases of non-specific inflammation, and from which the symptomatology differs but little. The inflammatory period of this affection, the consequences of which may be so serious, requires an antiphlogistic treatment which must quickly be followed by a general mercurial treatment.

The local treatment consists in applying leeches to the temples and mastoid processes, and as soon as the inflammation has a little abated, the pains become less, and the intensity of the photophobia decreased, we must immediately have recourse to blisters in the neck, on the temples, and over the orbita. The suppuration of that in the neck must be kept up, whilst those on the temples and forehead are dressed with ung. hydrarg. and renewed as often as they dry up under this

treatment. Mercurial ointment may be rubbed in at the base of the orbit, but we must not lose sight of the irritation of the eye and the contraction of the pupil; for these symptoms, belladonna, which is peculiarly sedative for the eye, ought not only to be employed as frictions around the orbit, but also in the nostrils, and internally combined with the protiodide of mercury, which I here also prefer to calomel. Besides these special indications, there are those which simple ophthalmia generally presents.

Syphilitic testicle. Syphilitic sarcocele, which must not be confounded with gonorrhœal epididymitis. This disease of the testicle, the consequence of symptoms which we have before considered, is seldom found as sole sign of a secondary affection; commonly preceded or accompanied by other symptoms of general infection, it frequently attacks only one testicle at a time. When the testicle is affected, it becomes indurated, increases in volume, and is pearshaped; sometimes it is unequal, and becomes relatively heavy. The disease is frequently accompanied or preceded by nocturnal pains in the loins. The induration may have its seat in the epididymis or the cord; but it is the substance of the testicle, which is almost invariably affected. A gonorrhœal epididymitis may be the cause which favors its development without the gonorrhœa having any other influence over this affection, or being its specific cause.

Syphilitic sarcocele may often be complicated, which renders the diagnosis very obscure; in dubious diseases of the testicles, the patient must be examined as to the antecedents, and before amputating this organ, we should recollect the prudent course pursued by Dupuytren, who, before having recourse to the operation, submitted his patients to an antisymphilitic treatment, and thus saved a great number of testicles, which others would have excised.

To the general treatment which almost always succeeds alone, ought to be added to accelerate the cure, repeated applications of five or six leeches every six or eight days along the cord. If the patient can rest, half a drachm of ung. hydrarg. fort. may be applied to the scrotum, and the diseased parts then covered with emollient cataplasms; but should there be pain, and if the patient does not rest, the scrotum should be enveloped in emplastr. de Vigo. c. hydrarg. or recourse be had to compression, in the same manner as we advised for the gonorrhœal affection of the testicle.

Falling off of the hair and nails. Although these symptoms are not very frequent, yet they occur often and regularly enough for us to recognize their existence, without depending solely upon the testimony of Fracastor and Fallopius. Generally it is, during an eruption of pustules of impetigo on the hairy portion of the head, or sometimes after the disappearance of a syphiloid, that the hairs fall, and most frequently in patients who have not taken mercury. The nails fall off, particularly when their matrix becomes the seat of the eruption.

Here the curative treatment is that of the affection, which precedes or accompanies it.

For the falling off of the hair, besides the general treatment, the head must be shaved and rubbed with stimulants, ointment with protiodide of mercury, or tincture of cantharides diluted with alcohol.

As regards the nails, they must not be pulled out, as in cases of simple onyxia, we must wait till they fall off, or detach them partially by applying to their diseased matrix, the local treatment advised for mucous tubercles.

SECTION IV.—SPECIAL TREATMENT OF THE TERTIARY SYMPTOMS.

According as the ravages of syphilis gain in depth, and the consecutive affections which it causes, are removed from the commencement of the general infection, we find them gradually losing their specific characters, which much less prominent in the secondary symptoms, disappear entirely, or partly in those of which we are about to speak.

The diagnosis of the affections of which we are now about to treat, and which may be grouped under the title of *tertiary affections*, from the order in which they are developed, is very obscure. Most frequently they appear only a very long time after the primary infection, and as other causes may produce similar effects, it is sometimes impossible to distinguish them. Being, as we before stated, non-contagious, they are only transmitted by inheritance, in as far as they produce effects in the habit and organization of the children, without any specific character, and which may generally be classed under the head of *scrofula*.

The signs by which we can determine the diagnosis of the tertiary affections, is drawn from their acknowledged frequency, after the appearance of primary syphilis; the absence of all other causes (when under dubious circumstances,) and especially as leading to a more certain diagnosis from the existence of characteristic secondary, either preceding their development, or being co-existent with them.

The secondary affections form a *characteristic chain* between the primary and tertiary symptoms. A careful observer will rarely find periostoses, exostoses, or deep seated tubercles occur, in consequence of a chancre, after the lapse of a longer or shorter period, without some sign of general infection, having been at a prior period developed, or still existing.

Recognizing as we do, the syphilitic virus as the regular cause of the tertiary symptoms, we must however confess, that if it undergoes a modification in the secondary symptoms, in consequence of which, as we have seen, it no longer is capable of inoculation, this modification is here still greater; and if I might hazard an hypothesis to explain some facts, whose immediate cause is difficult to discover, I should be inclined to say, that the virulent cause still exists in the secondary affection, whose existence it maintains by its presence, but it is completely transformed in the tertiary affection.

The more the disease penetrates into the system, losing its specific

nature, and undergoing the transformations, which tend to assimilate to diseases of another nature, the more difficult does the treatment become. The mercurial treatment affords a peculiar interest to those who will attentively observe its action: thus we find it of little efficacy, and indeed often hurtful in the primary affection, during the period of progression or increasing ulceration, it then becomes powerful, as soon as induration manifests itself in the chancre; and shows its greatest efficacy, when the characteristic general infection is in the period of incontestible secondary affections, again losing its curative properties in the tertiary affections, and that the more so, the further they are removed in their form from the preceding.

Deep seated tubercles of the skin, and mucous membranes, (lupus syphiliticus). These tubercles most frequently affect the *alæ* and *lobulus* of the nose, and sometimes show themselves on the *glans*, where they may be mistaken for superficial mucous tubercles; I have found them on the tongue, cervix uteri, &c. stimulating schirrous, or carcinomatous indurations.

Generally complicated with *scrofula* or cutaneous affections, their progress is slow, and unattended with pain; they deform the parts on which they are seated and are inclined to sink into the depth, becoming more and more indurated; then undergoing a kind of *ramollissement*, which is soon followed by an ulceration, the progress of which is difficult to arrest, and which destroys all the tissues, which the induration had attacked.

These tubercles, which may appear isolated or in considerable numbers, and assume forms to which more or less picturesque names have been given, are susceptible of a spontaneous resolution, or a kind of rapid resorption, under the influence of which they soften, wither, and without ulceration, terminate by transforming themselves into a kind of crust on the skin of a horny nature, which leaves, on falling off, a spot, most frequently depressed.

The treatment of the deep tubercles of the skin or mucous membranes, ought in the first place to consist in attacking all the complications which may co-exist with the syphilitic element, which is never the sole cause of their production. When all the indications which *scrofula*, cutaneous, or other concomitant affections may present are fulfilled, we must recur to the mercurial treatment. In these cases, we derive much benefit from mercury, combined with *conium*, and the success is often complete, when it is according to the case aided by other therapeutical agents, whose history and rules for their administration we have traced out. The local treatment requires, whenever any irritation exists, the application of emollients and narcotics; opiated cataplasms, fomentations with decoctum *papaveris*, *conium*, &c. If any inflammation exist, a few leeches ought to be applied at some distance from the indurated spots. Lastly, if the tubercles be in an indolent state, the dressings ought to be repeated once or twice a day with honey and protiodide of mercury, continued as long as it does not produce any irritation. When the disease still persists, a cauterization with

nitrate of mercury must be employed, but not so as to suddenly extend too deep, in order to avoid the inflammatory action, which is always injurious. This method often produces with the general treatment pretty rapid cures, especially when it has been early applied. Dressings of chlorinated soda and calomel, as recommended for mucous tubercles, often succeed, even in the ulcerative period, and when there is not too much irritation.

Most of the mercurial ointments are injurious, they irritate and produce inflammation. It must be remembered, that the treatment ought to be purely antiphlogistic, as long as any inflammation exists, whatever may be the internal treatment indicated, and followed according to the general state, and the other symptoms which may be present.

Osteocopic pains. These pains do not alone constitute a disease, they may however, undoubtedly exist alone, continue a time, and then disappear without leaving any perceptible change of structure in the regions they may have occupied; but most frequently they are the first apparent symptoms, as in most inflammations, of a periostitis or ostitis, and that especially, when they become more confined to one spot. The intensity of these pains, seems to depend upon the difficulty with which the periosteum and medullary membrane distend. They are generally nocturnal, but this is not a specific character without exception, for the contrary often occurs, and diseases unconnected with syphilis, may present the same phenomena.

The occurrence of osteocopic pains, when other characteristic symptoms of confirmed syphilis exist, ought not to induce us to suspend the mercurial treatment; on the contrary, this treatment, far from producing these pains, as has been asserted, soon calms them when properly administered. We must not mistake rheumatic, for osteocopic pains, if we wish to obtain from mercury what we have a right to expect, nor confound them with certain swellings of the joints, which the abuse of the medicament might produce.

The direct treatment consists in the local application of leeches, emollients, and narcotics. Antiphlogistics and sedatives often suffice to suspend, or remove these pains entirely. Nevertheless, it is not unusual to see them resist the most methodic treatments, and constitute one of the most distressing symptoms, depriving the patients of sleep, and thus disturbing all the functions. It is in these truly desperate cases, and also in those which are less intense, that the effect of blisters is quite astonishing. In my clinical wards, patients may be seen, who for six months and more, had not been able to obtain an instant's repose and who have been freed from their sufferings in four-and-twenty or eight-and-forty hours, when no change of structure had taken place.

The blisters ought to be applied directly to the seat of the pain: when it has drawn, the epidermis should be opened, but not removed, to avoid giving pain. The dressing of opiated cerate should then be applied, and over it, warm cataplasms, which must frequently be renewed, so as not to allow them to get cold. When one blister is dry,

another must be applied, and so on, if the pain return. In cases in which the pain returns too quickly after the cessation of the suppuration, perpetual blisters must be employed, instead of those recommended above. I can assert that by this treatment, without antiphlogistic preparation, eight out of every ten patients may be cured; sometimes however, the pain nevertheless remains, in which case a more energetic local treatment is required, as it only yields to a deep incision into the diseased parts, by which a true strangulation is relieved. The cessation of the suffering in these fortunately rare cases is instantaneous.

Periostitis. The uncomplicated and idiopathic inflammation of the periosteum is perhaps more rare than is generally imagined. The loosening of this membrane and effusion under it, which thus forms tumors adherent at their base, and which are termed periostoses, are most frequently owing to a superficial osteitis. These more or less circumscribed tumors, are generally situated on the superficial bones; tibia, clavicles, cubitus, radius, &c. and where these bones are nearest to the skin. Sometimes they are indolent, but most frequently painful to the touch, and present a more or less evident fluctuation. The skin over them may remain for a long time mobile, and without any perceptible alteration. Lastly, they may undergo a spontaneous resolution, or terminate by suppuration and form abscesses. When they are opened, the bones are found simply denuded, carious, or necrotic to various depths, and in the most fortunate cases, already presenting a surface covered with granulations.

In the first place, we must have recourse to the treatment recommended for the osteocopic pains, which accompany them, and under the influence of which they often disappear, often even when a very considerable effusion has taken place. If the tumor remain without acute symptoms, an application of diluted tincture of iodine, the strength of which must gradually be increased, has often succeeded with me, as well as the application of blisters and solution of corrosive sublimate, as in case of buboes.

There are some cases, in which, after the resolution has progressed with a certain rapidity, it suddenly stops: then we may substitute a methodic compression, as described by M. Lisfranc, avoiding causing an increase of pain; its effects may be increased by the simultaneous use of the mercurial plaster, or that of conium with iodide of lead.

If however, the periostoses has terminated by suppuration after having endeavored to procure its resolution without opening it, we must not wait till the skin has become changed, and the pus has accumulated in a large quantity and denuded those points of the bones, which otherwise would have remained sound. An opening should be made with a bistoury in the same direction as the axis of the bones, so as to allow the pus freely to flow out. The opening being made, the same treatment must be pursued as in cases of simple abscesses, or diseases of the bones, where these are affected.

Syphilitic osteitis. According to many writers on syphilis, this af-

fection is owing to a combination of the syphilitic virus with mercury; but we have repeatedly seen, in the wards of my hospital, in patients who have had characteristic, primary, and secondary affections, but without their having in any way employed mercurials. In fact, the occurrence of affections of the osseous system, does not by any means depend upon the employment or abuse of mercurials, in the treatment of syphilitic affections; but, as every attentive observer must acknowledge, their occurrence depends upon the antecedent syphilitic affection, for it will be found, that in most individuals affected with exostoses, either a chancre and secondary symptoms have existed, or a gonorrhœa, in which case there must have been a chancre in the urethra. Never will the development of these symptoms be found to depend upon the absolute quantity of mercury taken, but on a peculiar idiosyncrasy, or the faulty treatment of their antecedents.

Causes unconnected with syphilis may give rise to osteitis; but whilst syphilis is one of the most frequent, no observations go to prove that mercury alone, except on the alveola, in consequence of a mercurial stomati is, can produce similar effects, *without venereal antecedents*.

Osteitis has generally the same seat as periostitis; it is sometimes circumscribed, sometimes diffuse; it attacks the superficies or parenchyma of the bones. Slow or chronic in its progress, it often assumes a subacute form, and after remaining sometime as merely a simple osteocopic pain, the swelling it causes betrays its existence. The tumor arising from an osteitis, is either owing to an effusion of the succus ossium, as in the formation of callus in fractures, and then constitutes an epigenic exostosis of various form and volume, with either a broad or narrow base, and smooth or rugged periphery; or else the swelling depends upon the increase of the whole thickness of the bone, and produces the parenchymatous exostosis or hyperostosis. Osteitis ends in resolution, suppuration, (caries) necrosis, and in induration (exostosis eburnée).

Resolution is easy, when the swelling depends on the organic tissue, or an effusion of coagulable lymph. When the disease is seated in the spongy bones, those of the face in particular, suppuration is easy and frequent. Necrosis often caused by the violence of the inflammation, is still more frequent from a sudden effusion in the tissue of the bones, or from the loosening and destruction of the soft parts which surround them, and which involves that of their nutritive vessels. Lastly, the termination in permanent induration takes place whenever the tumor is only owing to an effusion of the saline inorganic matter, which enters into the composition of the bones.

The treatment of osteitis in the commencement, must be the same as that of osteocopic pains and periostitis. When the osseous tumor is developed, to the use of blisters, dressings of mercurial ointment on the denuded surface (about half a drachm per diem) may be added. Under this most powerful treatment with the internal exhibition of mercury when not contra-indicated, and sudorifics, protiodide of iron (in complications with scrofula,) and vapor baths, we obtain results, if opportunely employed, such as no other treatment affords.

In these cases, the other resolatives (iodine, iodides, &c.) locally employed as also compression, are most frequently void of any decided effects.

The treatment ought to be continued as long as any pain remains, or the swelling increases or diminishes; but when it becomes decidedly indolent and stationary, without any other symptom requiring active treatment, we must stop and not exhaust the system by useless, and therefore injurious, medication.

In venereal suppuration of the bones, or caries, especially of the bones of the face, mercury, which has hitherto been so serviceable, ceases to be useful, and even aggravates the disease, especially when salivation is allowed to ensue. We do not say its employment must always be avoided, but that its effect ought to be most narrowly watched.

Except as regards the syphilitic element, which ought never to be lost sight of, and which in a few cases affords the best indication without being the only one to be fulfilled, the treatment required by syphilitic caries, is the same as is applicable to caries in general. Nevertheless in caries, generally complicated with necrosis of the bones, and which must be distinguished from the more superficial and less serious, which follow previous affections of the soft integuments, which we mentioned above, we must not neglect to remove the diseased bones as soon as they are separated from the sound parts. I have seen the worst consequences from the neglect of this precept, and the more so, when at the same time an injudicious mercurial treatment has been used. I am convinced, that caries engenders caries, and that a bone, whose organic tissue has been destroyed by suppuration, or has perished, cannot be regenerated by any general treatment, and that we must not wait till the remains are spontaneously thrown out, as they form true foreign substances, maintaining and propagating the suppuration, which by reaching important parts, as the brain, for instance, produce the most serious consequences, and even death.

In the frequent cases of destruction of the maxilla superior, the teeth may remain perfectly sound, firm, or loose in their alveola; but when they are attacked above their neck, they ought to be extracted; for they only serve to retain portions of the dead bone, which by remaining, allow the disease to proceed still further. The destruction of the vomer is generally accompanied by that of part of the palate, where on the median line a tumor appears, which is soon followed by suppuration and ulceration of the soft parts. Here also the diseased portions of the bones ought to be extracted as soon as possible. I published some observations in the *Gazette de Hopitaux*, on a case in which a large portion of the superior maxilla become carious, necrotic, and deprived of its teeth, had become loose in the fossæ nasales, the soft parts of the cheek having remained sound. These portions of bone being too large to be extracted through the nostrils, I removed them by first crushing them with the instruments employed in lithotomy.

Before quitting this subject, I would merely add, that the continued

use of blisters placed as near to the diseased parts as possible, affords the most advantageous results.

When an osteitis has produced an exostosis, which has become permanently indurated, these tumors must not be touched, except when they produce too great a deformity or interfere with important functions; the epigenic pediculated tumors may easily be removed.

The treatment required by necrosis is the same as is applicable to it in general, the special indications are derived from the concomitant symptoms.

Gummata, nodus. Deep seated tubercles of the cellular tissue; a kind of chronic furuncle situated in the subcutaneous, or submucous cellular tissue; they only appear very late after the primary affection, and except in a few less severe cases they are the consequence of a deeply undermined constitution, under the influence of syphilitic cachexy. These tubercles, which are rarely isolated, but generally pretty numerous, and on divers parts of the body at the same time, commence by a small scarce perceptible, but hard tumor, adhering to the skin by a kind of footstalk, and moveable on the subjacent and neighboring parts. Their increase is generally slow and without pain, frequently occupying five or six months, or more. They then attain the size of a nut; still remaining very hard, they become adherent on all points of their surface, and then a kind of fluctuation becomes by degrees perceptible. The skin becomes red, purplish, and then thin, and perforated on several points, from which thin ichorous pus escapes, carrying with it the organic remains. These openings are succeeded by extensive irregular ulcerations, the skin becoming undermined and thin. These ulcers continue as long as the shell of the tubercle, in which the suppuration commences at the centre, is not thrown out, after which, if nothing else be present to keep up the suppuration, they progress towards reparation and produce a cicatrix, similar to those after extensive burns.

The evolution of these tumors, seldom occurs everywhere at the same time; most frequently they come in succession, so as to occupy months or years, notwithstanding any treatment which may be employed.

They are sometimes distant from each other, sometimes agglomerated. In two cases in my wards, the tubercles were situated in the substance of the tongue. These two patients, both entered for the third time, an interval of five or six months having elapsed between each time. To the touch, their tongues appeared filled with nuts. The destruction from ulceration was each time horrible, and to unaccustomed eyes, resembled cancers; but both have now been cured two years.

The principal aim of the treatment must be to sustain and recruit the constitution. It must be remembered, that we have to deal with a long and serious disease, which no medication can cut short in its development. As these symptoms generally show themselves in patients who have resisted the effects of mercury, it has therefore no power over it, and if its use be imprudently pushed far enough to pro-

duce the symptoms, which may attend its administration, the severity of the disease will be increased.

In the affection under our consideration, mercury is only indicated, when at the bottom of the cavity, after the escape of the pus, ulcers, with indurated base and callous edges, remain. The general treatment which succeeds best, although it frequently does not procure the resolution of these tumors, is the internal exhibition of iodine, either alone, or combined with iron. Bitters and tonics also deserve to be placed in the first rank. In many cases however, these tubercles are the sole remaining symptoms, and all their severity only depends on their purulent secretion, and the ulceration which follows them; so that the most rational treatment is to destroy them in their commencement.

M. Cullerier has suggested, that they should be attacked with blisters, and the caustic solution employed for the treatment of buboes, has with him as well as myself often succeeded. I have also found their extirpation, while yet hard, very advantageous. When suppuration is very evident, the pus ought to be allowed to escape, before the skin becomes too much changed. When suppuration has ensued, and even after the opening of the abscess, as long as inflammatory symptoms exist, emollients and local sedatives; later, for the ulcers which do not become clean, dressing with simple digestive ointment, then those we employ for chancres are required. Frequently extensive ulcerations become atonic, as in other cases of this kind, independent of the antecedents, have been promptly brought to cicatrization, by being bandaged with mercurial plaster (*Empl. de Vigo c. merc.*).

There are a vast number of diseases, which may be referred to tertiary syphilitic affections, but we are not at present able to determine their diagnosis, we must therefore content ourselves with saying, with *Mercurialis*, "*Cum videretis morbum quempiam communibus remdiis non curari, putate esse morbum gallicum cognominatum.*" And thus we must try a treatment, which may succeed, when the more rational have failed.

CHAPTER III.

TREATMENT OF NONVIRULENT AFFECTIONS.

SECTION I.—GONORRHŒA.

THE treatment of gonorrhœa ought to be divided into 1st, the prophylactic—2nd, the abortive*—3rd, the curative, properly so called.

* I have preferred retaining the term abortive, although objectionable to substituting another, the sense in which it is used will be evident from the text. H. D.

The prophylactic treatment having been considered above, we will proceed to examine that which is calculated to prevent the development of the disease, after it has commenced (abortive treatment.) In the first place, the patient must not only be removed from the causes which may have produced the disease, such as every kind of excitement of the sexual organs, but also all possible antiphlogistic means must be used. The following is the result of my experience: when an individual has exposed himself to a gonorrhœal infection, amongst the hygienic means then indicated, such as diet, rest, &c. baths and copious refreshing drinks, which are generally considered as so important, are far from possessing the efficacy, which has been attributed to them. The large quantities of fluid, cause the urine to be passed very frequently, thus fatiguing the canal, and predisposing it to inflammation; with regard to baths, when we find with what facility they frequently recall a discharge, which has ceased for some days, we may easily conceive that they may favor its development. After these general precautions, the diseased surfaces require to be modified; here two methods present themselves, 1st, revulsion,—2nd, direct medication. All varieties of gonorrhœa, requiring modification in each, we shall further develop the following principles in the proper place. The first question which arises is, what is necessary to be done, when the abortive treatment has not been employed, or has failed, and the disease has become confirmed? As gonorrhœa in the acute stage presents the characters of catarrh, the treatment ought to be essentially antiphlogistic. The abstraction of blood will form the basis, and local depletion will be found the most advantageous. Leeches as has before been observed, ought never to be applied on loose duplicatures of the skin, with intervening cellular tissues, as on the eyelids, skin of the penis, &c. as they may cause œdematous swelling, and a gangrenous erysipelas; when applied at some distance from the seat of the disease, they are equally efficient, provided their number be in proportion to the gravity of the disease. Another no less important point to be observed is, that leeches ought never to be applied upon a declivity, or within reach of the diseased organs, that their bites may not become soiled by the morbid secretions; for if the gonorrhœa be complicated with chancres, they will be transformed into so many syphilitic ulcers. The use of general or partial baths during this period, has been much praised; generally they answer well, but it may not be amiss here to note some peculiarities in their employment.

I prefer general baths. The temperature at which they are used, ought to be moderate, as hot or cold baths have very different properties from those properly termed tepid, and which depends upon the impresson, made upon the patient; so that the proper degree of heat depends upon the feelings of each individual, and not upon the thermometer. A temperature, which would render a bath exciting, would be very hurtful, and it is by no means uncommon to hear a patient complain of having suffered more, either during or after its use, than before. Baths prolonged, during a considerable time, are from the

relaxation they produce, very favorable in their effects; but in ordering them, we must pay attention to the individual disposition; for there are some, in whom they produce an excitement by their action on the nerves. Their efficacy is therefore relative, and sometimes their use must be altogether forbidden. In all cases and whatever may be the mucous membrane which is diseased, it is of great importance to free its surface from the morbid secretion. Washings, injections, and local baths, will advantageously accomplish this end; but these different means must be judiciously employed, duly weighing the good they produce, with the inconveniences which sometimes attend them. They ought never to be so used as to fatigue the organs. We must also facilitate the functions of the parts diseased, or modify, or even suspend them if possible, when they are the cause of irritation.

The patient's drink should be copious, simple, agreeable, and easily procurable fluids. The diet must be more or less restricted, according to the intensity of the inflammation and the state of the patient. The utility of perfect rest is not less apparent than in other cases of inflammation.

Under the influence of the treatment which we have just described, the symptoms of the acute stage may completely disappear, sometimes it has sufficed to allow the disease to exhaust itself, only removing the causes which produced it; but more frequently it becomes chronic, in which case another treatment must be employed. When it is bordering on the acute stage, we must not too soon abandon the employment of antiphlogistics; but at the same time neither ought we recklessly to continue their use, as they often favor its prolongation. A very favorable methodic transition consists in suspending the use of the too relaxing agents, and employing direct resolatives, which must be succeeded by revulsives, the properly so called antibleorrhagics and astringents, either general or local tonics used in the same manner, excitants, &c. as soon as the acute symptoms or pain diminish or disappear.

We will examine the antigonorrhœal medicaments, as they will best apply to the several varieties.

Frequently however the gonorrhœa, or the chronic state remain; in which case, we must endeavor to discover the cause which maintains it. Sometimes without enquiring about the existence of any change of structure in the tissues, upon the disease not having yielded to the usual treatment, the acute stage has been reinduced either by means of simple irritants, or by a new infection. If the efficacy of the former of these means is not proved in most cases, the latter is quite unjustifiable.

An antisyphilitic treatment has frequently been employed, either in despair or from a conviction of the syphilitic nature of gonorrhœa, and has sometimes been attended with success. In cases in which the discharge is only the consequence of concealed syphilitic ulcerations, the results of the treatment are more decided and easier to understand. But the antisyphilitics which are employed, may influence

other diseases beside those dependant on syphilis. May they not, by acting as revulsives or tonics, so modify the system as to produce a cure? For my own part, I never employ antisyphilitics, nor especially mercury in gonorrhœa, except they be positively indicated, as where every other treatment has been resisted, or true syphilitic symptoms exist, under circumstances which we have before described. In all cases in which I have found them indicated, I have avoided giving them during the acute stage.

SECTION II.—SPECIAL TREATMENT OF GONORRHŒA.

First Species: Gonorrhœa in Women.

Varieties $\left\{ \begin{array}{l} \text{of the vulva} \\ \text{— vagina} \\ \text{— uterus} \\ \text{— urethra} \end{array} \right\} \text{alone or variously combined.}$

Women rarely consult a medical man early enough to allow of the gonorrhœa being cut short in its development, either because they do not confess their disease until it is too late, or because they do not at once perceive it. However, if applied soon enough, that is within the first two or three days, astringent injections and applications would generally be crowned with success, in cases where the vulva, vagina, or uterus are affected; whilst copaiva and cubebæ have sometimes succeeded in urethral cases. If slight inflammatory symptoms should already exist, the application of a few leeches to the vulva might be added.

But as we before said, we have rarely an opportunity of preventing the development of gonorrhœa in women, and we must therefore obtain its cure by a slower and more methodic treatment.

In the acute stage, whatever may be the variety or varieties, the most absolute rest possible is of the first importance, and abstemious diet ought to be observed. Baths are most useful, and whenever the state of the parts will allow, vaginal injections should be made, whilst in the bath, with the same water. These injections are peculiarly efficacious in vaginitis, and uterine gonorrhœa. Should the acuteness of the symptoms require the employment of leeches, (if no secretion takes place in the fold of the thighs, &c. constituting an extra-genital gonorrhœa,) they should be applied on the exterior of the greater labia, and always nearer to the plica cruralis than to the perinæum, to shelter them as much as possible from contact with the morbid secretion, which always flows towards the inferior parts, and tends to irritate the wounds they make. In the contrary cases, the leeches must be applied in the fold of the thigh. When the gonorrhœa, and especially where the uterus is affected, is accompanied by a febrile reaction, great benefit will be derived from general depletion. The patient should drink freely of some agreeable beverage, but the quantity taken, does not require to be so large as in men, as the heat upon voiding the

urine is by no means so intense. The local treatment is however the most important. Where the vulva and external parts are affected, cleanliness, and emollient and slightly narcotic fomentations will be found very beneficial. The parts diseased ought to be isolated; thus the thighs should be prevented from touching the greater labia, which should be separated from each other by a tampon of fine lint, dipt in emollient narcotic liquids. When the inflammation is very acute, and the introitus vulvæ is either naturally very small, or become so from the inflammatory swelling, we must confine ourselves to external applications, and even avoid injections, as even the introduction of the olive-shaped cannula may produce too great an irritation; but when it can be affected without giving pain, a tampon of fine lint, dipt in the medicated fluid, and moistened two or three times a day should be introduced, as it supplies, in a manner, the place of cataplasms. When the uterus is affected, emollient cataplasms should be applied to the body. I never order leeches to be applied on the cervix uteri, as in case of the existence of virulent ulcers in the interior of this organ, they would probably be transformed into as many chancres. The tampons ought, if possible, to be renewed two or three times a day, as otherwise they retain the morbid secretions too long and thus increase the irritation. I need scarcely add, that if a pessary has been introduced, it ought at once to be removed.

Acute urethritis is seldom accompanied by retention of urine, and when it does exist, it is generally of short duration, and yields to antiphlogistic treatment; but nevertheless, sometimes it requires the use of the catheter, which ought to be introduced with the parts exposed, notwithstanding the objections raised, as less pain will be caused, than if the surgeon had to feel his way. I have found in nervous subjects, in whom the strangury seemed to depend on spasms, that a tampon, imbibed with a solution of belladonna, sufficed to relieve the symptoms.

The swelling of the nymphæ and labia, which we have compared to a kind of phimosis or paraphimosis peculiar to women, yields generally to rest and antiphlogistic treatment; but when the swelling is considerable, with serous infiltration, incisions must be made in it, as gangrene from excessive inflammation, only occurs in cases of neglect, and where sufficient blood-letting has not been insisted on. When this unfortunate termination already exists, if inflammation be still present, an antiphlogistic treatment must be pursued, consulting the general strength of the patient, and lint, dipped in a solution of extract of opium, applied. A urethro-genital gonorrhœa may be complicated with simple abscesses, whose detailed history we do not want to enter upon. We may however remark, that as these abscesses are generally the result of a violent inflammation, their development will be prevented by the treatment which is used to combat it, and more especially, when we avoid any further irritation of the already diseased parts.

Thus, in cases of acute gonorrhœa we ought not to use the speculum, and I can affirm, that I have never seen a case at the Hôpital

des Vénériens, in which these abscesses have been developed, in consequence of the use of this instrument, as some have thought.

These abscesses sometimes depend upon the inflammation of the cysts, which some women have at the entrance of the vulva; in all cases, they ought to be promptly opened. It ought to be noted, that suppuration here quickly succeeds to inflammation, and if the pus be not allowed to escape, infiltration of the loose cellular tissue, surrounding the rectum, and lastly, perforation of this intestine, thus forming either complete or incomplete fistules.

The vaginal abscesses ought to be opened by a large incision: the pus is often brownish, with the odor of *fæcal* matter from the neighborhood of the rectum, without any communication existing with this intestine. When the abscess is the consequence of an inflamed cyst, the matter is mostly stringy. If these fistules are yet in an early stage before their passages have undergone the mucous transformation, compression by means of a tampon introduced into the vagina, generally suffices to obliterate them. When this means has failed, cauterization of the passage, with nitrate of silver, either in powder, by means of a director, or better with M. Lallemand's instrument, has often succeeded. I have derived much benefit in some cases from traversing the fistule with a probe, covered with a bit of lint rolled around it in a spiral form, and dipped in nitrate of mercury. After one or two cauterizations to destroy the pseudo-mucous surface, tincture of cantharides has been introduced in the same manner, to excite the development of the granulations necessary to obliterate the cavity.

In one case which had resisted these various treatments, I obtained a cure by introducing into the fistulous passage the urethrotome, which is employed to divide the meatus urinarius, and thus scarifying its whole length in several points of its circumference. When the fistules are of but little extent, the shortest method is to treat them like common fistulæ in ano.

Ovaritis, considered as a complication of gonorrhœa, requires antiphlogistic treatment, commensurate with the intensity of the symptoms. Leeches applied to the lateral and lower parts of the abdomen, anus and sacral region, general depletion, aided by emollient fomentations and cataplasms, generally succeed. The bowels ought to be kept open by gentle laxatives. Here, as in orchitis, frictions with mercurial ointment made upon the abdomen, may promote the resolution.

When the acute stage is passed, revulsives, such as blisters, applied to the internal surface of the thighs, frictions with ung. antim. et pot. tart. in the iliac region, will be found very advantageous. I have not found it necessary to employ mercurials internally.

But sometimes acute gonorrhœa in women, whether complicated or not, resists the most judicious soothing treatment and is aggravated by the use of mercurials. In some of these cases in which the red and turgid mucous membranes afford a copious purulent discharge, attended with acute pain, which neither rest, depletion, emollients, nor narcotics can assuage, I have obtained astonishing results from the use of nitrate of silver.

A superficial cauterization with solid nitrate of silver, or a solution of it, applied by means of lint, has favorably modified the inflamed surfaces and produced a solution of the disease. After the use of the cautery, a tampon of dry lint must be employed to prevent the contact of the parietes of the vagina.

As has been seen, when the disease is fully developed, and in the acute stage, we never use the antigonorrhœal medicaments, such as copaiva and cubebs, &c. for if they are not always hurtful, they are at least without effect.

When the acute stage has yielded, at the same time as the sedatives are continued, such as diet drinks, regimen, repose, and baths, we must hasten the cure, so as not to allow the chronic state to become established, by employing resolute applications and injections. The fluid I prefer, is either a solution of crystalized acetate of lead, or sulphate of alum and potass.

As the affection becomes removed from the acute stage, the strength of the solution is to be increased to an ounce to the pound of water. By means of these injections and tampons dipped in the same liquids, sixty out of a hundred patients will generally be cured in the space of from twenty days to two months, including the treatment of the acute period; at least this is the result of the observations made in my wards.

The chronic stage is however, far from always yielding in so prompt a manner. When the tissues have undergone no change, we must employ more tonic applications; one which I frequently use, is a decoction of oak bark, with equal parts of the solution of sulphate of alum. Should irritation exist, I substitute a decoction of mallows with the alum. Zinc, extract of ratanhia, sublimate, alum, &c. may be successively employed. Injections with alkaline chlorides have only appeared to me suitable to some cases, in which the vaginal discharge was offensive, or where ulcerations existed. In order to reach the cavity of the cervix uteri, a syringe, such as employed for injecting a hydrocele, should be used.

Some discharges, which resist all the above applications, seem to be maintained by the contact, even of the mucous membranes, and the depth of the parts continually placed in the unfavorable conditions of heat and moisture. It occurred to me, without knowing that Ambrosius Paré had proposed it, to isolate the diseased surfaces, by means of a speculum fenestratum, and thereby allow the continued introduction of the external air, as the parts which are most exposed to it heal the quickest. But as I found some difficulty in applying it, I was obliged to relinquish its use. Laterly, the following process has succeeded well with me; I fill the vagina, without much distending it, with dry lint, renewed two or three times a day, according to the quantity of the discharge, which in the cases which terminated successfully, was white and milky, and proceeded from the vagina alone. But when the chronic stage, or the gonorrhœa is accompanied by a change of tissue, it is that which we have to contend with, in order to

procure a cessation of the discharge. If any vegetations exist, they must be treated as we shall presently describe. Ulcerations and papulous granulations must be cauterized either with nitrate of silver, which is to be preferred, or with nitrate of mercury, by means of a bit of lint; the parts to which it is to be applied, having previously been cleaned with a piece of dry lint. Should the mucous secretions, as those on the cervix, be too adherent, they must first be coagulated with the liquid caustic, so that they may be removed with the pincette. The energy with which the caustic is to be applied, must be in proportion to the affection. Its efficacy is particularly evident during the granulating period, and when the ulcerations present the appearance of a blister. When the tissues have been destroyed to a certain depth by the ulceration, caution is required in the use of the caustics. Under these circumstances, I have succeeded by sprinkling calomel on the diseased parts, and then applying dry lint. After each cauterization, a tampon must be applied, moistened according to the case with one of the before mentioned liquids.

Like other portions of the mucous membrane of the sexual organs, the internal surface of the womb is frequently the seat of ulcerations, which the means hitherto pointed out cannot cure. We must here, as in the ulcerations of other parts, modify the surfaces in a more powerful manner; but the greatest precautions are necessary in cauterizing the interior of so delicate an organ, the reaction of which would be so powerful; for whilst the most powerful caustics applied to the orifice of the cervix, generally produce no pain, fluids scarce possessing any caustic properties, being introduced into the cavity of the uterus, may cause the most serious consequences.

Wearied with the protracted continuance of certain uterine discharges, I made some attempts to cure them. I first used an injection of one part nitrate of mercury, and eight of water. Some patients had very violent hysterical attacks; one of them had a cerebral congestion, which caused a momentary apprehension of apoplexy. These symptoms, which all arose a few minutes after the injections, yielded very rapidly to antispasmodics, and in the case with cerebral congestion, on a quantity of blood being taken from the arm. Although the affections submitted to this treatment were either cured or partially so, I was obliged to reduce the doses to avoid the serious consequences. I subsequently obtained some cures with one part of nitrate of mercury, to twelve of water, without producing the symptoms I before mentioned; but yet the action of these injections was not always unattended with pain, or some nervous reaction of an hysterical character. I then substituted six grains of nitrate of silver to the ounce of water, and found that in some instances, a chronic purulent uterine discharge was cured after two or three injections. I may here remark, that nitrate of silver applied to the cervix and cavity of the uterus, frequently acts as an emmenagogue. We may from the foregoing conclude, that uterine injections of a solution of nitrate of

silver, ought to form a powerful means of treatment in uterine catarrh, and particularly in uterine gonorrhœa.

The antigonorrhœal treatment by internal medication, is far from possessing an absolute efficacy in utero-genital gonorrhœa, as it seems in women, to act only on some isolated varieties. In like manner, the ergot of rye appears to me, in the few cases in which it has been of service, only to influence uterine gonorrhœa, and to be inert in cases where the vagina and vulva were affected. Copaiva and cubebs appear to have no decided action on the vagina, or uterus, whilst a urethral gonorrhœa is in women, as in men, powerfully influenced by them, so that what we shall say with regard to urethral gonorrhœa in men, will be equally applicable here. Sometimes, however, a local treatment is required; thus it is not rare to find vegetations originating in the interior of the urethra, constituting what were formerly termed *caruncles* or *carnosities*; these maintain discharges, which cease when they are destroyed by incision or cauterization. I lately operated one, which protruded from the meatus urinarius, and occupied the whole extent of the urethra, arising from near the neck of the bladder. In many cases, chronic urethral discharges, which are more frequent and obstinate than is generally supposed, only yielded to injections made in the same manner and with the same fluids as we shall point out, when we come to treat of gonorrhœa in men. Under some circumstances, even cauterizations with nitrate of silver, have terminated discharges, which were probably kept up by erosions, whose presence was betrayed by great sensibility during catheterism.

After the cure of vaginal and uterine gonorrhœa, I advise injections of cold water to be continued for some time, once or twice a day, taking care to discontinue them four or five days before the period when the menses are expected, and again employing them four or five days after their cessation.

As the local treatment of gonorrhœa in females is of the greatest importance, it may not be amiss to give some details as to its mode of application.

I. Fomentations and injections ought to be tepid, when composed of emollient liquids; but cold when resolutes, tonics, astringents, &c. are applied.

II. The injections may be made with the common female syringe.* The patients should be instructed not to introduce the instrument more than an inch or two beyond the annulus vulvæ. In children, or where the hymen exists, a straight cannula with a conic end must be employed. The patients should place themselves in a recumbent posture, with the pelvis elevated so as to allow the fluid to reach the more remote parts of the vagina, this position being continued after the injection, causes it to act as a local bath.

Vaginal cataplasms can only be applied where the annulus vulvæ is of sufficient dimensions.

* Similar to Clark's. H. D.

To administer uterine injection, the patient must be so placed as to allow of the introduction of the speculum. The fluid, whether emollient, astringent, or simply tonic, can be injected by means of a simple syringe, furnished with an elastic rubber tube, the free end of which is to be introduced a few lines into the orrifice of the cervix uteri; this portion of the tube must be covered with some fatty substance, and its dimensions must not be such as entirely to fill the crifice, but permit the reflex of the ejected fluid.

As the caustic injections ought to be allowed to remain but a short time, I have had a syringe constructed composed of two pumps, with separate pistons, terminating in a double cannula: one contains the caustic fluid, the other water, so that either can be injected at pleasure. I first inject the caustic fluid, which I allow to remain a minute or two, after which the water is forced in so as to wash the surfaces.

Urethral injections are made with the same syringe as in men. To prevent the fluid entering the bladder, it will suffice to compress the posterior part of the urethra against the pubis, with the finger introduced into the vagina.

When tampons are to be applied, an injection must first be used, of the same fluid as is used to moisten the tampon, made of lint and sufficiently large to fill without distending the vagina, which must next be introduced. Women in applying it themselves, use a finger to push the lint far enough to reach the cervix; but if much of the fluid has been pressed out, a fresh injection must be made. Although it is generally necessary to allow the patients to apply the dressings themselves, those applied by a surgeon are far more efficacious. When the surgeon places the tampon himself, he ought to use the speculum, by which means he can carry it with certainty to the cervix, and distribute it to all parts of the vagina.

It may be proper to remark, in concluding these observations, that sometimes when a solution of acetate of lead has been employed, its color becomes changed, and in some women the tampon after remaining twelve or fourteen hours becomes quite black; this seems to be owing to the formation of a sulphuret of lead; for this has been most frequently observed in women affected with a fetid discharge, or who have the annulus vulvæ greatly dilated, and thereby allowing the easy introduction of the mephitic air, when the bowels are relieved.

To apply the solid nitrate of silver, I use a holder, with three blades, having a slightly curved tooth at their extremity, and moving in a cannula, like the instruments employed in lithotomy. By means of this instrument, the caustic is firmly held and very easily applied.

Second Species: Gonorrhœa in Men.

Varieties . . . $\left\{ \begin{array}{l} \text{of the glans.} \\ \text{prepuce,} \\ \text{urethra,} \end{array} \right. \left\{ \begin{array}{l} \text{balanitis} \\ \text{posthitis} \\ \text{gonorrhœal urethritis} \end{array} \right\} \left\{ \begin{array}{l} \text{pseudo gonorrhœa} \\ \text{alone or combined.} \end{array} \right.$

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External Gonorrhœa.—Balanitis and posthitis.

When the external gonorrhœa is slight, it frequently yields to rest, soothing diet, and cleanliness. The cessation in these cases, is the more easy if the prepuce is still moveable on the glans; but when the disease has become a little developed, the aid of art is required. When the glans can be uncovered, and the inflammation is not excessive, the method which I have found to succeed best, is passing the pencil of nitrate of silver gently over the diseased surfaces, so as superficially to cauterize them, after which it will suffice; to place a bit of dry linen around the glans, drawing the prepuce again over it. After this little operation, slightly resolute fomentations should be applied to the penis, consisting in compresses, either dipped in cold water or diluted liq. plumbi. The linen should be removed twice a day, applying each time a little lead water.

The disease frequently yields to a single cauterization with nitrate of silver; but under some circumstances, it has to be repeated two or three times, at intervals of two or three days.

Should the inflammation be very acute or complications exist, especially a natural or acquired phimosis, active antiphlogistic treatment will be required; thus leeches must be applied in the genito-crural plica. Emollient local baths of decoctum malvæ, linseed, tepid milk, the slightly narcotic decoction of dulcamara, or poppy heads, repeated injections of the above fluids between the glans and the prepuce, are indispensable. When there is much œdema and but little inflammation, one or two slight incisions on the lower part of the prepuce, produce a salutary disgorgement. When an erysipelatous state exists, the incisions seem to hasten the termination in gangrene, whilst depletion, as directed above, strict diet, absolute rest, are of the greatest service; gentle laxatives are also frequently very useful. When gangrene was threatened or already existed, I have derived much benefit from fomentations with a solution of extract of opium, and injections of the same fluid between the glans and prepuce. The internal administration of opium, has also afforded great relief in doses of a grain, two or three times in the four-and-twenty hours, but more particularly when given in an enema with eight grains of camphor. Mercurial ointment applied between the glans and prepuce, which some have so highly praised, has appeared to me hurtful at some period of the disease in which it was employed; but I have sometimes found it of service, when, according to my method of treating erysipelas, I have applied it to the prepuce when this complication existed. I ought how-

ever to observe, that I have found mercurial ointment less advantageous in œdematous erysipelas of the sexual organs, than in the other varieties of this affection.

But under the circumstances we have just mentioned, and in the uncertainty as to the existence of a complication with syphilitic chancres, I am never in haste to operate a phimosis, unless there be eminent danger of gangrene, or that it already exists; being convinced that the operation frequently adds to the gravity of the disease, as we shall have occasion to point out when we treat of the different kinds of phimosis.

Frequently we find an external gonorrhœa maintained by a want of cleanliness, an herpetic affection, alterations of tissue, such as ulcerations, of which we have already been treating; the presence of vegetations and especially by the existence of a permanent phimosis, either congenital or acquired.

Generally as the phimosis is one of the most powerful agents in maintaining the discharge, we can seldom hope to cure it until the phimosis be removed. Sometimes however a cure may be obtained whilst it still exists, by using resolute and astringent injections between the glans and prepuce, and fomentations of the same fluids on the whole length of the penis. But here also an application of nitrate of silver, either in substance or solution, offers the most favorable chances of success.

So efficacious have I found the nitrate of silver, that the first thing I do in treating a case of acute balanitis with an inflammatory phimosis, is superficially to cauterize by introducing a stick of this caustic, and carrying it rapidly round between the glans and prepuce. So rapid are its resolute effects, that a single cauterization frequently suffices, and in four-and-twenty hours, enables us to uncover the glans.

In the treatment of balanitis, neither mercurials, copaiva, nor other anti-gonorrhœal medicaments are required.

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#### Urethral Gonorrhœa.—Gonorrhœal Urethritis.

We are often consulted by patients who are disturbed after having exposed themselves to infection by a suspicious intercourse. Sometimes no symptoms yet exist; in other cases the prodromi have appeared: slight itching in the urethra, especially in passing water; a sense of weight in the penis and scrotum; and sometimes a want to pass the water frequently, which is soon followed by a little redness of the meatus urinarius, and an increased secretion of mucous, but not yet altered.

These slight symptoms, which a little fatigue and excitement may produce, do not announce the presence of a gonorrhœa, for they frequently disappear again; but at least it ought to induce a patient to be on his guard.

Where there is an uncertainty as to the future symptoms, an ener-

getic abortive treatment would certainly not be indicated; but it ought to be remembered, that many gonorrhœas, after the ordinary cause which produces them, are only definitely produced by errors in diet, and excitement of every kind, to which the patients sometimes continue to subject themselves.

As soon as a person has just fears, he should be advised to submit to a judicious diet; rest, particularly of the parts affected; a mild diet especially avoiding fermented liquors, which tend to produce the disease. In this kind of prophylaxy, we must beware of advising warm baths, as they often suffice to favor the development of the discharge.

If however, the gonorrhœa manifests itself with its pathognomonic sign, that is the muco purulent discharge proceeding from the interior of the urethra, whether there be pain or not, it ought to be arrested as soon as possible after its origin. The symptoms which may follow a gonorrhœa, are in direct proportion to its duration, and the development it is allowed to attain, or to which it is urged by bad treatment.

When a discharge shows itself, it has been preceded, or accompanied by pain, or is indolent. In the two former cases, it is more difficult to prevent the development than in the latter. The method which I have found to succeed best, is as follows: when the discharge is quiet at its commencement, from the first to the third or fourth day, and pain, without other signs of a very acute inflammation be present, twenty to thirty leeches ought to be applied to the perinæum, according to the strength of the patient. But at the same time, as leeches are applied as a prophylactic against inflammation, or leastwise to prevent the increase of it, if it already exist, the discharge may be suppressed by the internal use of copaiva, cubebs, or their analogous substances. It is to be observed, that in this case, the doses must be larger, than those required gradually to suppress a discharge, as the end sought to be attained, requires a pertubatory effect, a sudden revulsion. The strictest repose ought to be observed with a rigorous diet, unstimulating broths, cooked fruits, and small quantities of diluent fluids.

By pursuing this treatment, we have not unfrequently found discharges, taken at the proper time, stop in three or four days. If this has not always cut short the gonorrhœa, in the majority of cases, the very acute symptoms have not been developed, and by pursuing the same treatment a short time longer, the disease was terminated by the twentieth or twenty-first day.

I have generally found, that when pain exists from the commencement of the disease, injections have not been so serviceable as in the contrary cases. Indeed they have sometimes seemed to me to have been the cause of the failure of the abortive treatment, although in some cases, injections alone either of a resoluive, tonic, astringent, or caustic nature, have checked certain discharges at their commencement.

Should the discharge commence without pain, or any sign of inflam-

mation, abstraction of blood is unnecessary, and the action of copai-va, or its substitutes, is in most cases sufficient. Under these circumstances, the common empirical method (by drastic purgatives) is very successful. One of the preparations frequently employed, is the vinous tincture of colocynth, but which will be rejected by every judicious practitioner: in this case, great benefit may be derived from the employment of astringent injections alone, when there is little discharge, but when more copious, associated with internal medication. A means for cutting short the development of a gonorrhœa, consists, according to the proposition of Carmichael, in injections of nitrate of silver, into the urethra. These injections, which are to be repeated twice a day, are composed of ten grains of solid nitrate of silver, to the ounce of distilled water. I have employed, and prefer the following method; I introduce into the urethra, Lallemand's caustic holder, and then exposing the caustic, I withdraw it, at the same time giving it a rotary motion, so as superficially to cauterize the whole of the mucous membrane of the urethra. If after the first cauterization, too much inflammation should supervene, recourse must be had to antiphlogistics, otherwise a similar cauterization should be made, three or four days after the first.

The use of the nitrate of silver deserves great attention, and its employment ought to be more experimented on than hitherto has been done, to ascertain the best mode of its application, and the precise circumstances under which it ought to succeed. The recent researches I have made, allow me to recommend, as at present most preferable, injections of weak solution of nitrate of silver, commencing with a quarter of a grain to the ounce of water. If after a day or two, there be no increase of pain, nor diminution of the discharge, the strength may be increased by a quarter of a grain, till one of these two effects occur.

I have also procured the cessation of discharges which were at their commencement, by superficially cauterizing the canal, and then introducing a bit of dry lint into the urethra, by a manipulation, which we shall presently have occasion to notice.

Unfortunately we cannot always succeed in the abortive treatment, either from the failure of the medicaments, although judiciously employed, or from the patients not regularly submitting themselves to it, or lastly, from continuing their excesses in diet or sexual intercourse, or any other bodily fatigue which it may be observed, may, in a few rare cases, have been of service, but they cannot be quoted as examples to be imitated.

More frequently we are only consulted by the patients at a more advanced period of the disease, when a different treatment is required.

In the acute stage, some otherwise celebrated practitioners have advised recourse to be had in the first instance to the anti-gonorrhœal medicaments, at the head of which always stand copaiva. This may sometimes succeed, but I think that all who have had the opportunity of seeing a great number of cases and of accurately observing them,

will confess that it generally only oppresses the digestive organs, causing them to revolt against a medicament, which at a later period may become necessary; sometimes we moreover find the inflammation increase under their untimely use. The most rational treatment is here that of the symptoms. To the general treatment mentioned above, must be added local depletion in as great a degree as possible; local baths of decoction of mallows and poppy-heads to be used after each emission of urine, for eight or ten minutes at a time; should the pain be very acute, a little laudanum may be added, or a decoction of belladonna may be substituted. As the emission of urine is one of the principal exciting causes of pain, either by distending the urethra by the volume of the jet, or by its irritating properties, we must, especially in men, seek to modify it. The more aqueous it be rendered the less hurtful it will be, and the more frequently the water be passed the smaller will be the jet, as it depends on the degree of contraction of the bladder, which also depends on the distention of this organ. We see, that of two evils we here must avoid the worst, for were it possible entirely, and without danger, to suppress the urine, it would be far preferable.

The erections require peculiar attention, whether they are lascivious or simply automic, accompanied with pain or free from it, the patient must be removed from everything which can excite voluptuous ideas. Rest, general and local antiphlogistic treatment, to which the patient is subjected, often act in a powerful manner in repressing this symptom, but generally it nevertheless continues or increases. The patient should be recommended to avoid covering himself too much in bed when the erections occur, and also to apply cold lotions to the penis. Placing the naked feet on the cold floor, is frequently very efficacious. But the most powerful medication is the use of camphor, combined with opium, either in pills or an enema. I have found but few patients who have not experienced benefit from this treatment.

Whatever may be the degree of intensity of the gonorrhœa, the treatment just pointed out, will, when it is uncomplicated, suffice to combat the disease, during the acute period of which not only the actual antisypilitics, either mercurials or sudorifics, but the anti-gonorrhœal medicaments, as copaiva, cubebs, turpentine, and injections, ought to be excluded. As long as there is much inflammation, injections ought not to be used, even emollient and narcotic fluids produce more inconvenience by their mechanical action upon the urethra, than good by their soothing properties. To the foregoing, but very few exceptions will be found.

During the continuance of a gonorrhœa, the patient must never be allowed to expose himself to the least fatigue without wearing a suspensory, which ought to fit exactly, so as not to produce any uneasiness in the organs which it is designed to sustain.

Although mostly urethral gonorrhœa exists without complications, and may be cured by the means we have just pointed out, cases sometimes occur which require a peculiar treatment.

Sometimes a hæmorrhage occurs in consequence of the urethra being ruptured during an erection. This hæmorrhage, which in some cases proves salutary as a means of local depletion, may have been caused by the patients who, with the intention of removing the painful retraction of the urethra in the *erection cordée*, break, as they term it, the cord by placing the penis on a flat resisting surface, a table for instance, and then strike it pretty sharply. The hæmorrhage is seldom great and stops of itself, without generally requiring any applications. More absolute rest must be insisted on than ever, and emollients and camphor to prevent the return of the erections will suffice. In some few more severe cases, in which the rupture has been either deeper or attained a larger vessel, recourse must be had to cold applications to the penis, the internal surface of the thighs, the perinæum and hypogastrium. Vinegar and water, or especially ice, generally succeed, acidulated drinks, lemonade, &c. are equally suitable. The quantities of fluid taken should however not be too great, so as to require a frequent emission of urine, which by distending the canal, tends to recall the hæmorrhage by opening the lips of the wound. The pelvis should be raised and the patient not kept too warm in bed. Should the hæmorrhage nevertheless continue in a sufficient degree to become alarming, a slight compression might be applied. By compressing different parts of the canal, beginning at the posterior part, we might render the diagnostic more certain. In one case, in which the hæmorrhage seemed to proceed from the pars membranosa, it was stopped by placing a rolled napkin between the thighs and compressing the perinæum. A circular and slight compression might be applied to the penis for the pars spongiosa; it often suffices to stop the flow of blood, but frequently the hæmorrhage returns the first time the urine is passed. Then, however objectionable it is to place a foreign substance in the inflamed urethra, we must introduce a bougie, which, by compressing the vessels, stays the effusion of blood; sometimes additional circular external compression is required, but great caution must be used in its application. Generally this bougie may be removed after twenty-four hours, but when the hæmorrhage has been great and the instrument does not excite much pain, it is advisable to leave it a day or two longer. If the bougie has been removed too soon and the hæmorrhage re-appears, it must be re-applied, if it be not merely a slight sanguinolent discharge.

A symptom of gonorrhœal urethritis, which requires peculiar attention, is the dysuria in its different degrees to complete retention. As soon as difficulty in the emission of urine appears, antiphlogistics must be particularly insisted on, leeches in large numbers on the perinæum, blood from the arm, baths, frictions with extract of belladonna on the perinæum, and the same extract conveyed into the rectum.

As long as the patient passes his urine, we must content ourselves with the means just pointed out, and beware of having recourse to other diuretic drinks than those mentioned above, as the obstruction

is not in the kidneys but in the urethra, and depends on the swelling of its tissues.

When, however, the retention is great or even complete, catheterism must be employed; but it should always be preceded by depletion in order to facilitate it. A curved elastic gum catheter is to be preferred. It has generally been found that a middling-sized catheter was more easy to introduce than a very small one. The instrument lubricated with an ointment containing extract of belladonna should be introduced very slowly; it must in some measure make its way by compressing the engorgement. After the introduction of the catheter and the evacuation of the urine, the question arises whether it should be allowed to remain or be removed? The fear of increasing the existing inflammation has caused some to direct that the catheter should be withdrawn as soon as the bladder is emptied and passed again when it becomes necessary. But this practice, which may succeed, is not without objections. Frequently after having once passed the urethra with facility, the inflammatory stricture which required this operation, remaining or even increasing, perhaps from passing the catheter, renders the passing it a second time much more difficult or even impossible; so that I prefer, whenever any difficulty is found on passing the instrument the first time, leaving it in the urethra, and recurring with still more energy to the means calculated to combat the inflammation, and only remove it when it is no longer confined or retained at the point at which the stricture is situated.

A complication of gonorrhœal urethritis of not frequent occurrence, but nevertheless deserving particular attention, is the presence of phlegmonous engorgements, either simple or owing to an infiltration of urine, which may occur in various parts of the urethra, near the frenum, fossa navicularis, the pars spongiosa, or posterior parts. These engorgements, at times of considerable extent, are not generally so and have the form of knots encompassing the canal. They sometimes occur singly, sometimes several together, and are frequently very painful. Those which depend only on an extension of the inflammation of the mucous membrane of the urethra, are more limited, their progress less rapid, and their termination in resolution or induration more common. Those on the other hand resulting from infiltration of urine through a rupture of the urethra, follow the course of urinary abscesses, into the history of which we need not enter. These engorgements which sometimes, as we have said before, are owing to the presence of indurated chancres, which then depend on the specific cause of syphilis, and are to be referred to concealed chancres, most frequently in the fossa navicularis, thus explaining the assertion of Wedekind, that the existence of tubercles near the frenum was a pathognomonic sign of a virulent gonorrhœa.

But as regards the treatment of gonorrhœa, complicated with the above named symptoms, as soon as an engorgement is perceived above the urethra, the antiphlogistic treatment ought to be still more rigorously enforced. The tumors resulting from the engorgement must be

carefully examined every day and opened as soon as fluctuation is perceived.

Sometimes the skin is adherent on the points where the subcutaneous cellular tissue is also inflamed; but it is also frequently moveable even when pus is already present. After the opening has been made, a bit of lint should be placed in the wound, not only to prevent it from closing too soon, but also to keep the opening in the skin parallel with that made in the cavity beneath. Of course this cannot apply to cases in which a communication exists with the urethra, in which case it will suffice to keep the lips of the wound in the skin apart without inserting the lint deeper. The presence of engorgements and urinary abscesses may produce a retention of urine, and then catheterism may cause the purulent cavity to be opened into the interior of the urethra.

I have never seen any serious consequences occur from opening urethral abscesses early, although in some cases, either at the time of opening or soon after, a certain quantity of urine has escaped, but it soon resumed its course by the proper passage. I have in some patients, where these abscesses have been mistaken, or treated with a hope of obtaining their resolution, seen very serious consequences, such as the rapid propagation of the inflammation, the formation of extensive abscesses, and destruction of a portion of the urethra. So long as no pus exists, we ought to endeavor to procure the resolution of engorgements in the acute stage, by the means already pointed out, to which should be added, emollient local applications, and fomentations in preference to cataplasms, which in some cases, cause an œdematous swelling. During the acute period of an urethral gonorrhœa, an œdematous state of the skin of the penis manifests itself, which may produce a phimosis, or in case of a displacement of the prepuce, a paraphimosis.

Not unfrequently a kind of cord is observed running the whole length of the penis generally on the dorsal surface. It is owing to an engorgement of the lymphatics, and very rarely extends beyond the posterior part of the penis; but now and then can be traced to the inguino-crural region, where it terminates in swollen ganglions.

Otherwise these complications of gonorrhœa require antiphlogistic treatment, leeches are particularly serviceable, and should be applied on the penis and in the groin.

Either during the acute period, or when it has seemed to yield, the neck of the bladder becomes irritated or even inflamed and the patients are tormented by the frequency of the emission of urine, (tenesmus of the bladder), accompanied by some few drops of blood; the urine is frequently thick and purulent. The treatment I pursue, and which I seldom find fail, consists in adding to the local and general treatment, friction, with laudanum and emollient cataplasms to the perinæum and abdomen. But a method, the effect of which is immediate, consists in administering a cold enema with a little laudanum, and which ought to be retained in the bowels. The food and drink should also be cold and in small quantities.

In cases of prostatitis, emissions of blood with half a drachm of mercurial ointment applied to the perinæum with emollient cataplasms, produce most beneficial results; but the ointment should be renewed twice a day.

The other complications which may exist, must be treated according to their nature, always having regard to the most urgent symptoms.

To sum up the foregoing, we may say, that the most powerful treatment in the acute stage of gonorrhœa and its complications, consists, excepting a few particular indications, in the judicious employment of antiphlogistics. If patients would carry out this mode of treatment to its full extent, with sufficient patience, the cure would be, if not the most rapid, yet the most certain.

When the acute form has ceded to the chronic, it would not be proper to persevere in the use of antiphlogistics, or reckon upon the powers of nature, aided alone by diet; we should thereby risk not only exposing the patient to a perpetual discharge, but also from the duration of the inflammation to alterations of the tissue.

Whenever therefore the acute stage has ceased, although the erections may still be pretty frequent and painful, the glans still red, especially at the meatus, the penis, as sometimes occurs, in a state of semi-erection with a feeling of weight, I employ the medicaments more particularly termed antigonorrhœal, which however, if they produce the least degree of relapse, ought to be discontinued, and antiphlogistics again employed. When the patients first present themselves to us in the chronic stage, we do not think it proper, as some have asserted, always to commence the treatment with antiphlogistics, which here, as in a host of chronic affections, far from curing, only serve to perpetuate the evil.

In the treatment of urethral gonorrhœa after the acute period, the quantity of fluid taken into the stomach ought to be limited, and the use of warm baths for the whole body relinquished, as in many subjects they maintain the discharge or even recall it.

The partial baths should be nearly cold when near the acute stage, and afterwards quite cold. They should not be used long at a time, and seldom employed except as a means of cleanliness, unless required as tonics or astringents. In some cases of gonorrhœa, with but slight discharge, depending on some error of secretion without alteration of tissue, partial baths of cold lead or slightly acidulated lotion, repeated three or four times a day, will be found of great service, as also sea or river bathing, should the season permit.

The patient's diet may be a little more substantial and gradually increased to a tonic regimen, when the disease only consists in a slight mucous discharge. The use of good wine and generous diet suffice in some cases to put an end to discharges, which have resisted other treatment. The patients should continue the use of the suspensory, and carefully avoid every kind of fatigue, more particularly when near the acute stage, nor commit any error of regimen, as the least fault of

this kind may produce a renewal of the acute symptoms at the moment when the cure seemed complete. Acidulated drinks are here of great service. Natural or artificial chalybeate waters, the syrups of symplicum, quinces, ratanhia, and tolu, ought more particularly to be employed when the acute stage has long ceased. The bowels should be kept open, but not too free.

After the means we have just pointed out, there are other more powerful medicaments, which are employed to remove the morbid discharge. They may be divided into internal or external revulsives, and direct or local medicaments. The internal revulsives consist, as we have already had occasion to remark, in simple purgatives, having no particular action on the urinary organs and in medicaments, which act not only on the digestive organs, but also on those which secrete the urine.

*Copaiva.* I shall here relate the observations I have made, as regards its use and which confirm those of some of the most distinguished authorities. It is very evident that copaiva has a primary action on the digestive canal. In some individuals, its action on the stomach is more decided, in which case it produces vomiting; but this observation requires a little consideration, as it is of great importance in practice, the vomiting does not always take place in the same manner; in many persons it is only owing to disgust, a purely nervous effect, a want of tolerance, which manifests itself from the beginning; in others on the contrary, after having been borne for a time, it causes an irritation, and the vomiting occurs from a more or less intense gastritis.

These different modes of action of copaiva ought to be taken into consideration, for us to suspend its use, and resume it after allowing the organs to repose, and if requisite to treat the morbid state which it has produced, and which sometimes compels us entirely to relinquish it.

It is to be observed that the action of copaiva on the stomach, has generally no influence on the progress of a gonorrhœa, and consequently it is useless or even hurtful to continue it, if the vomiting prevents it from traversing the digestive canal; but when it does arrive in the intestines it may remain inactive or cause frequent stools and even diarrhœa; these two modes of action have not the same result in every individual, and all who have treated many cases of gonorrhœa, must have found that in some individuals, it causes the disease to disappear when it purges, and in others is only efficient when it does not produce this effect. These two kinds of revulsion present yet other differences. *Ceteris paribus*, when copaiva does not purge, independent of the peculiar action, which it may have upon the bowels, it is quite evident that a certain quantity passes through the kidneys. The urine passed by the patients, contains a portion of it, as is to be found by the powerful smell. It seems to me to be worthy of note, that urethral gonorrhœa alone is greatly influenced by copaiva, whilst it is of little efficacy, where the vagina and uterus are affected. In the case in which we are now examining the use of copaiva, that is as proper

to stop an urethral discharge, it has seemed to me that it was the more useful to arrest the disease at its commencement, the more its purgative action was developed; the contrary was the case in the curative treatment of gonorrhœa in the chronic form.

Copaiva, like all other medicines, does not produce the same effects, by the like doses in all individuals. In this respect there are a host of varieties depending on the idiosyncrasies of the patients, or the peculiar state of the intestinal canal; so that it is impossible to determine *a priori* what dose will be required to produce a purgative effect. Under some circumstances, certain additions must be made to the copaiva, to determine its action in the manner desired. In the administration of this medicament, I think sufficient attention has not been paid to the practical observations, which have given rise to a host of valuable formulae, and it seems that caprice rather than a well directed choice, directs the employment of one or other of the preparations. If it be wished to obtain the purgative action of copaiva, it must be administered in sufficient doses, or even aided by laxatives or purgatives. If on the other hand it be desired to avoid this effect, it is then important to graduate the doses and add opium, or actual astringents. If the action is wished to be more especially directed to the kidneys, a combination with diuretics must be employed.

Beside what we have stated above of the action of copaiva, we sometimes see other effects produced after its use: the excessive vomiting and hypercatharsis, may indeed be considered as such; the patients in the e cases have a feeling resembling sea-sickness. At other times, copaiva produces cholæ, and during the epidemic at Paris, we found it occasionally the exciting cause of cholera. When given in large doses, copaiva has produced very serious effects on the nervous system: in my clinical lectures I showed a woman, in whom its improper administration had produced chorea with *semi-paraplegia*. I was requested to see a young woman, in whom six drachms of copaiva, administered in an enema, had an hour afterwards produced a severe cerebral congestion, with temporary hemiplegia. Amongst the effects peculiar to this medicament, may be ranked a cutaneous eruption of greater or less extent, and a form generally resembling roseola, although it may assume that of urticaria, or simple erythema. In a practical point of view it is worthy of remark, that these symptoms which are produced by copaiva, are almost always owing to a bad state of the intestinal canal, and that roseola shows itself most frequently when a saburral state exists. It is also generally during cold and wet weather, in spring and autumn, that these eruptions become epidemic, in all persons treated with copaiva. The cutaneous affection is always injurious and never lessens the discharge; but indeed it may be said that on the other hand, it aggravates it so much that its use must be suspended.

Copaiva may be administered either by the mouth or rectum, but notwithstanding the eulogiums, which have of late been passed upon its administration in the form of enema, I can positively assert that

its action is as uncertain, as it is efficacious when conveyed into the stomach. Copaiva balsam is frequently administered in substance, in doses of from ten to sixty drops: Ansiaux and Ribes, have, after the example of Bell and Swédiaur, extended the dose to two ounces per diem. Without adopting this practice generally, we will not join with M. Jourdan in his condemnation of it, as without playing with the lives of our patients, there are circumstances under which, after having proved the susceptibility of the individuals, the good effect can only be obtained from this medicament, by giving it in the above large doses, continued for several days, if nothing occurs to forbid it. The most common dose is however from a drachm to an ounce, two or three times a day.

Copaiva is the more efficacious when it is administered in a liquid form, and unless there be some particular indication requiring a corrigens or adjuvans, it should be given uncombined. Yet beside the cases, which require other substances to be associated with it, in some subjects it produces so much disgust and nausea when given in a liquid form, that we are obliged to render it solid and give it in the form of pills. Latterly it has been enclosed in divers envelopes or capsules, which have facilitated its administration without disgust, but which does not so effectually prevent the nausea as has been asserted.

When copaiva is administered by the stomach, care must be taken that it be given at a certain period after the meals, two or three hours at least, as otherwise the digestion is liable to be disturbed. For this reason the patients generally prefer taking it morning or evening. It is by no means uncommon for persons who are taking copaiva for the first time, especially in the alcoholic form, as given at the end of the work, to find the taste very agreeable; but the illusion seldom lasts long, for the first eructations produce repugnance to take the medicine which was formerly pleasing.

Most patients can better bear this medicine if an acid draught, as lemonade, be taken at the same time. When it nevertheless tends to produce vomiting, I have found the effervescing lemonade of service.

When from the susceptibility of the stomach, uncontrollable vomiting or repugnance on the part of the patients, copaiva cannot be introduced into the superior part of the digestive canal, it must be given in an enema, which is best administered in the evening, for the patients retain it better when in bed. The rectum should be previously cleared by a simple evacuative enema, a certain time previous to that containing the medicine, otherwise it would not be retained as the already excited contractions of the rectum, would be augmented by its action. The dose of copaiva, *ceteris paribus*, should be larger than if taken by the mouth, and except where a purgative effect is desired, as the medicament ought to be retained, to produce its effect, it should be administered in a small quantity of vehicle and combined with opium.

In whatever manner this remedy may be applied, it seldom arrests the discharge at once; generally when it has been suppressed it returns, if the medicine be discontinued, and again disappears when it

is resumed, so that to obtain a durable effect it must be continued eight or ten days after the entire cessation of the discharge, gradually diminishing the doses.

*Cubebs.* This drug, which the Indians praise so much in the treatment of gonorrhœa, and which was then eulogized by the English, is notwithstanding the opinion of the author of the *Pharmacopée Universelle*, an excellent means of suppressing gonorrhœal discharges. Sometimes less efficacious than copaiva, it has, however, frequently succeeded in cases where the latter had failed. Not unfrequently it is necessary to use them alternately or combined.

Cubebs do not act quite in the same manner as copaiva, its powerfully exciting action, influences more particularly the digestive organs, irritating the stomach and small intestines, without so much affecting the urinary organs. Although some instances may be mentioned of its successful employment in the acute stage, it is then generally more hurtful than useful. It is given in doses of a scruple to two drachms, either alone or variously combined, from once to four times a day, it may be given by mouth or in the form of an enema. I have, though rarely, seen it produce the same effects upon the skin as copaiva, so that it ought to be preferred for individuals and in seasons in which cutaneous eruptions are to be feared.

*Turpentine.* I have found the anti-gonorrhœal action of turpentine far inferior to the two former substances.

As external revulsives in the treatment of chronic discharges in men, blisters applied to the internal surfaces of thighs and hypogastrium, have been of service, and this means has appeared to me particularly serviceable when an herpetic complication has existed. Dry frictions and vapor baths have also arrested obstinate urethral discharges.

*Injections.* Much has been said for and against the employment of this mode of treatment. It is evident that in general in the treatment of a disease, local medications are the most effectual where the diseased organ is attainable, and the more especially is it the case in an affection, generally admitted to be of a purely local nature. On one side the most rapid cure being the most favorable, and injections being the means by which it is to be obtained, they have necessarily been preferred in a host of cases. To which may be added, that they form so easy and cheap an application, which may easily be concealed and have the immense advantage of not disturbing the functions of any other organ or the general health. The principal objection to injections and that which has caused them to be rejected by those who are averse to them, is the property which has been attributed to them of producing strictures. A modern author, to whom we are indebted for many excellent pathological works, and amongst others on the diseases of the urethra, quotes a case in which a single injection produced a stricture. But upon careful examination it will be found, that most strictures of the urethra only occur in patients who have had a gonorrhœa several times, or one of very long duration, or which re-

mained unarrested. Many patients have never used injections or have used them at too late a period, when alterations of tissue had already occurred. If strictures have occurred when the injections have been made at a proper time, it is because they have remained ineffectual and have not prevented the disease from continuing, and producing merely by its long duration and progress, morbid alterations, which have falsely been attributed to the remedies. And further, it has not been possible in all cases to ascertain the state of the tissues before using the injections. I have found the judicious use of injections affords the most prompt and favorable results, and that the more rapidly they cure, the less the patient will be exposed to organic changes in the tissue of the urethra, which, as we before said, are always in proportion to the time of duration of the disease.

The symptoms attributed to the repercussion from this method of treatment, are either chimerical or ill explained, at any rate they are not sufficiently constant to authorize us in considering them as effects, necessarily depending on this cause. Most frequently their development is only a coincidence, or to be attributed to the improper use of the remedy. Thus under some circumstances, irritating injections used at an improper time may have produced a cystitis, orchitis, &c. in like manner, an inflammation of the urethra may occur, or by their acting suddenly in an astringent manner produce induration. But in these cases, the surgeon or the remedy is to be blamed.

Moreover, at the time when the researches, which appeared the most conclusive against the use of injections, were made, this treatment being most frequently used, most of the patients affected with stricture, had of course been submitted to it; but if a similar inquiry were instituted at the present day, an equal number of strictures would be found in subjects, who have never used injections. This latter examination would be attended with great difficulty, as the individuals who have strictures, are generally those who have had obstinate discharges, for the cure of which every kind of medication has been employed before an examination was made, which showed the organic alteration.

When it is required to suppress a discharge in its commencement, I prefer the alterative perturbatory injections of nitrate of silver. After the acute period, I advise resolute injections of liq. plumb. to be employed; then if after these have been used six or eight days, no result be produced, the nitrate of silver must again be employed or replaced by astringents: alum, zinc, laudanum, &c. Where all sensibility having disappeared, only a whitish gleet remains, tonic injections of red wine, either alone or combined with tannin, or sugar, sometimes suffice.

The injections should be used cold, and repeated three or four times a day, a single syringeful at a time forced into the urethra with moderate strength, without hurting the meatus urinarius, with the cannula of the instrument. The patient should be seated on the edge of a chair with the penis raised, the lips of the orifice pressed gently against the cannula, to prevent the reflux of the fluid, which should be allowed to run

through the whole length of the canal, and be retained in it for the space of about a minute.

As soon as the discharge has stopped, the number of the injections must be gradually diminished and soon altogether discontinued; for the treatment which has produced the cure, may recall the disease if injudiciously continued.

I cannot conclude my remarks on injections, without saying one word upon a new preparation, which I have lately employed at the Hôpital des Vénériens; I mean the iodide of iron, (iodure de fer.) Iodine had already been employed in the treatment of gonorrhœa, by Richond and Henry; and it occurred to me, that its combination with iron might produce still better effects. The following is the result of my researches:—

Where the patients were affected with obstinate gonorrhœa, the injections with iodide of iron have arrested the discharge in four or five days. In others, this medicament produced at first some pain, reproducing the acute stage and changing the nature of the discharge, which from being muco-purulent became serous and tinged with blood. In these cases, by suspending the treatment, the disease completely disappeared in seven or eight days. Some other patients were obliged to discontinue this remedy from its causing too much irritation.

The iodide of iron, which has afforded me a considerable degree of success, deserves to be better examined, in order to ascertain the conditions of its decomposition, which hitherto has caused its effect to vary. To attain the same end, in some patients, one grain of the iodide of iron has sufficed, whereas in others, the disproportionate dose of eighteen grains to the same quantity of fluid has been required.

Although gonorrhœa in its divers periods, may yield to a variety of treatments, without one being superior to another, yet it sometimes resists every method which science can devise. In these cases, the urethra should be attentively examined, for which purpose a variety of instruments may be employed, and we shall frequently detect at various depths, either morbid sensibility alone, or some obstacle which announces the presence of an organic change.

Where a morbid sensibility exists in any part of the canal, without any other signs being requisite, the precepts of Fallemant must be followed; the solid nitrate of silver must be conveyed to this point, by means of his caustic holder. I apply the canterization in cases where even no morbid sensibility exists, but where a discharge has resisted every other treatment, I introduce the instrument as far as the prostatic region, and expose the caustic, withdraw it, giving it at the same time, a rotatory motion.

Under similar circumstances, I have recently introduced a bit of lint, with a view to keep the parieties of the urethra separate, as in the treatment of balanitis. This strip of lint is introduced with the greatest facility, by means of an India rubber cannula, introduced to the posterior part of the urethra. One of the ends has a loop made with a thread, so as to afford a resting point for a style, which holds it

whilst the cannula is withdrawn; when this is done, the style is also removed, whilst the lint remains in its place, where it ought to be kept till the next time of passing the urine. If too much irritability be not present, it should be replaced two or three times in the twenty-four hours; otherwise once will suffice. The use of this strip of lint often succeeds alone, or may powerfully aid the effect of injections, cauterization, or internal treatment.

*Stricture of the Urethra.* Frequently, only a slight hypertrophy exists, and temporary dilatation suffices: an elastic gum bougie should be worn for five or six minutes every evening, beginning with the size which can be introduced with little trouble, and gradually increasing their dimensions as they pass with greater facility.

When the mucous membrane is a little softened, which shows itself by easily bleeding, cauterization, combined with dilatation, is an excellent method of treatment.

When any ligatures exist, they must be divided. These ligatures, formed by plastic tissues, have a tendency to reproduce themselves after being once divided. Here permanent dilatation would be advisable, and at first rather powerful, at least as far as the irritability of the canal will permit.

In the case of indurated or callous strictures, and which sometimes exist with a considerable shortening of the canal, it is necessary to ascertain, if the induration be not the consequence of an urethral chancre. If the induration be owing to a chancre, the treatment for indurated chancre must be applied, and it then yields without mechanical means.

When a simple gonorrhœa has caused an induration and callous, unconnected with the syphilitic virus, cauterization imprudently employed, may produce serious consequences. Scarifications prudently made, and combined with a gradual dilatation aided by resolatives, applied both internally and externally, must be employed.

If actual excrescences exist in the canal, dilatation combined with cauterization often succeeds. The excrescences which may sometimes be recognized by bleeding from the canal, without the instruments having made a false passage, and which then yield a sensation, like that which would be felt in passing through the tissue of the spleen, easily yield to calomel, conveyed in substance by means of a bougie, or to a cauterization with alum, according to the method of M. Jobert. When a stricture is irritable to whatever kind it may belong, the irritation must first be subdued, and we must not be rash with the direct applications, and even if possible, abstain from them altogether.

When the action of the dilating bodies can be borne, a quicker and better method is that of the permanent dilatation as before described; but where it produces symptoms of irritation in the urethra, testicles, neck of the bladder, febrile reaction, or where the patient is compelled to pursue any occupation, which requires him to rise, we must give the preference to the temporary dilatation made in the evening. In some patients, an interval of a day should be allowed between; in which case

there will be less difficulty in passing the instrument, and it will be borne with greater facility.

Generally I prefer the instrument made of elastic gum. For permanent dilators curved bougies are less liable to fatigue and hurt the surface of the bladder. For temporary dilators, very supple conic bougies are required.

*Gonorrhœal epididymitis.* All diseases of the testicle may exist during, or after the course of a gonorrhœa. Some diseases, although in their nature foreign to gonorrhœa, are influenced by it, or modify it in their turn.

But there is one which shows itself as a frequent and regular consequence, namely, engorgement of the epididymis, which should be strictly termed *gonorrhœal epididymitis*, and which has been improperly designated, orchitis, gonorrhœal testicle, &c.

The affection of which we are now speaking, does not occur once in three hundred cases, during the first week of the existence of a discharge, generally it is after the second, but especially the third or later, that it becomes developed.

Besides the discharge which is in some degree the special cause, the *sine qua non*, the most constant occasional causes are fatigue, constipation, the use of excitants of every kind and the want of a suspensor. According to my observations upon patients affected with epididymitis, about one in twenty of them will be found, in whom it showed itself after the use of the special anti-gonorrhœal medicaments, so that it is not absolutely correct to say, that this affection most frequently depends on the sudden suppression of a discharge, by the use of the ordinary medications. The contrary may be maintained, namely that the sooner a gonorrhœa is cured the more speedily is the patient protected from epididymitis.

It has at all times been observed, that the left testicle was more frequently affected than the right; the reason of this greater immunity of the right testicle is, according to the observations made in my wards at the Hôpital des Vénériens, as follows:—all the individuals who carry the scrotum on the left side of the seam of the trowsers, and most persons do so,\* have the epididymitis on the left side and vice versa. In the last research made relative to the seat of the epididymitis, we found but a single exception to this rule which was in an individual, the seam of whose trowsers did not come up to the perinæum. In a patient who had had an epididymitis on both sides, and who came to the hospital with the affection on the left side, although he wore the scrotum on the right side, it had commenced on the latter side. There may be some exceptions, but the principal cause which determines the side, is that which we have just mentioned.

As regards the symptomatology, the following is what occurs: the first part affected, that in which the disease commences, and in which it may continue without extending further, is the epididymis. No go-

\* Is not the reverse the case in this country? H. D.

norrhœal affection of the testicle occurs, without epididymitis being present. The engorgement of the epididymis which generally succeeds, but sometimes precedes the pain, is the symptom which is the most obstinate. Next in frequency to the epididymitis, the cord is affected, and more particularly the canal's deferens; but the affection is never confined solely to it, but the epididymis is always implicated.

A fact, important to be observed as regards the disease of the epididymitis and canal's deferens is, that there are two varieties of epididymitis: the one sympathetic, when the epididymis alone is affected, the other from succession, or from continuity of the disease, or by extension of the inflammation, when it extends from the urethra to the canal's ejaculatorius, and thence to the vesiculus seminales, canal's deferens, and lastly to the epididymis, as demonstrated by pathological anatomy. This distinction is by no means unimportant, as regards the prognosis and the treatment.

If the disease increases in intensity, the neighboring parts become affected, either from the extension of the inflammation, or hindrance in their functions; it is thus that the affections of the tunica vaginalis occur; sometimes it becomes inflamed and produces all the symptoms common to the inflammations of the serous membranes; pseudo-membranes, serous or albuminous pus, sanguinolent exhalations; at other times, and which is most commonly the case, without partaking of the inflammation, it presents the symptoms of symptomatic dropsies, which arise from a hindrance in the circulation. In all cases, epididymitis is the *cause of these symptoms which never exist alone.*

The swelling in the epididymis may occur, either gradually or suddenly; the effusions into the tunica vaginalis, are more rare when the swelling occurs slowly.

If the disease continues to progress, the cellular tissue of the scrotum, and even that of the cord become affected, and the same result occurs as in the tunica vaginalis; either œdema from faulty circulation, or an actual phlegmonous state. Then the skin of the scrotum, the veins of which may only be swollen, and the capillary circulation increased, sometimes presents the characters of erysipelatous inflammation. The body of the testicle which most frequently remains intact, and only suffers from pressure, the greater and more painful when to the engorgement of the epididymis is added an hydrocele, may however in some cases participate in the disease. Without, in this place, entering into the details of symptoms and their course, which are too well known to require our consideration, we may state that it is the last parts which have become affected, which recover first. Hydrocele in particular yields the more quickly, when owing to an inflammation of the tunica vaginalis; but when it is a passive effusion, it may be produced long after and offer much more resistance.

Epididymitis rarely ends in suppuration, but when the cellular tissue of the scrotum becomes inflamed, it is perhaps more frequent.

It deserves to be noted, as the contrary opinion generally prevails, that the discharge which is often much diminished, during the course

of an epididymitis, never entirely ceases, or at least it does not occur more than once in two hundred cases; the more abundant return of the discharge follows the decrease of the intensity of the inflammation of the epididymis; but the artificial increase of the discharge, during the acute stage of the epididymitis, which is either not influenced, or is aggravated by it.

As a diagnostical sign, one of the most constant is the co-existent discharge. The sympathetic epididymitis is less serious than that from extension of the inflammation.

The epiphenomena, or less constant symptoms, such as hydrocele, œdema, erysipelas, or phlegmon of the scrotum, &c. add to the seriousness of the affection according to their intensity.

The treatment I have found to answer best is, in the first place, the prophylactic, as the use of a suspensory, the antiphlogistic treatment of the gonorrhœa, and anti-gonorrhœal medicaments administered at an early period; then, as curative treatment of the epididymitis, rest in an horizontal position, keeping the testicle elevated, general blood-letting, and leeches applied on the course of the cord and the perinæum; and at the same time, with the antiphlogistics, the application of compression.

By means of compression, we obtain the cure of sympathetic epididymitis in five or six days. When well applied, it prevents the development of hydrocele, and indeed it may permit of the patients continuing to follow their occupation without feeling any ill effects.

Compression is applied by means of bandages of emplastr. c. hydragr. about half an inch in width. The diseased testicle being then carefully held, so as not to occasion too much pain, is to be turned towards the lower part of the scrotum without distending the cord, at the same time separating it from that on the other side. The strips should then be applied in circles, beginning by placing the first on the insertion of the cord, and sufficiently firm to prevent the organ from slipping. This being done, the circles should be continued around the testicle, so as to produce a considerable, but uniform pressure, avoiding as much as possible, making any folds in the skin. Beyond this point, separate strips should be applied, so as to exercise a pressure from above below, and thus forming a kind of basket.

If this dressing is to succeed, the sufferings of the patient will diminish from the moment of its being applied, and at length entirely cease. If this be not the case, it must immediately be removed; for if it increases the pain, it has either been ill applied or does not suit. We must not however allow ourselves to be deceived by some little pain proceeding from the first band pressing the skin, and which is generally only felt the following day or later. It will in this case suffice to cut the band, in order to allow the patient to support the rest of the dressing. Otherwise the dressing should not be renewed, except when the organ has decreased, and becomes loose under it.

To obtain, by the foregoing means, a radical cure, and to prevent a relapse at the same time as the epididymitis is treated, the discharge

should be repressed instead of excited; for as long as it remains, it continues to be the cause of the disease, which it frequently reproduces.

*Third Species: Gonorrhœa, common to both sexes.*

Varieties . . . .  $\left\{ \begin{array}{l} \text{of the eyes} \\ \text{— anus} \\ \text{— mouth} \\ \text{— nose, \&c.} \end{array} \right\}$

#### FIRST VARIETY.

Blenorrhœa oculi:—Ophthalmia gonorrhœica.

This disease is undoubtedly more frequent in men, than in women, and far more frequent in infants, immediately after birth, than in adults; it generally commences in one eye only, although both are frequently attacked, especially in children. Its development must be attributed to the direct application of the gonorrhœal matter, to the conjunctiva, and not to the sympathy existing between the sexual organs and the eyes. A man is more likely to soil his fingers, which may then convey the irritating matter into the eyes, and the infant to come in contact with it, in passing through the infected vagina. Were it owing to sympathy, the disease would certainly be more common. Simple catarrhal ophthalmia may develop itself, during the existence of an urethral gonorrhœa, as under any other circumstances, and thus render the diagnosis somewhat obscure or even impossible, as there is no difference between simple catarrhal and gonorrhœal ophthalmia, except in the cause which is often difficult to determine, and in the more serious consequences of this latter variety.

The first thing to be urged in the treatment of gonorrhœal ophthalmia, is prompt and energetic employment of the treatment, as hesitation involves most frequently the loss of the eye.

After having recommended the patient to avoid every thing that may irritate the organs of vision as touching them with the fingers, soiled with the muco-pus of the gonorrhœa, we ought as soon as the first symptoms of ophthalmia show themselves, and without waiting till it becomes fully developed, or for a more certain diagnosis, to pursue the following treatment: if the patient be robust, he should be bled, and a large number of leeches, twenty to fifty, applied at the same time to the temple and around the eye affected, carefully avoiding the eyelids. This being done, the eyelids should be reverted without fatiguing them by too great a pressure, and then a stick of nitrate of silver gently passed over them, so as to whiten the surface of the palpebral conjunctiva, and then still more superficially that of the bulb.

After this cauterization, which to succeed must not be very energetic, an injection of cold water must be made between the eyelids,

so as not to allow any of the caustic to remain on the cornea. As soon as this little operation is ended the eye must be covered with compresses, dipped in a cold decoction of poppy-heads. But as in this serious ophthalmia, much sympathetic irritability, or even successive inflammation of the deeper seated parts exists; the pain is often very acute and attended with photophobia. This latter symptom and the consequences it produces by the contractions of the pupil, and the adhesions from effusions which sometimes occur, are very advantageously treated by extract of belladonna applied to the basis of the orbit, and the nostril of the side affected.

Should a chemosis already exist, a symptom requiring the greatest attention, and which generally involves the destruction of the cornea, by a kind of strangulation, at whatever period the treatment may be commenced, it must without delay be excised by raising the mucous membrane with a small hooked forceps, and removing it with the curved scissors. When it is only an œdematous chemosis, the chances of success are far greater than when the chemosis depends on an actual phlegmonous and indurated state; in which case the excision generally becomes impossible, and only allows of incisions being made, which are far less to be depended on.

Whether a chemosis have been excised or not, stress should be laid on the application of nitrate of silver. When it is applied to a mucous membrane, it almost immediately changes the nature of the secretion, which from muco-purulent becomes sero-sanguinolent. When an application has succeeded, after this artificial secretion, the œdematous swelling of the palpebræ decreases, the congestion and inflammation of the conjunctiva become less intense, and the disease progresses towards resolution; to complete which, a derivans in the back of the neck, (a blister or seton) and the use of some collyrium; foremost amongst those to be preferred is nitrate of silver, a grain to the ounce of water.

But if the disease still remains, and the puriform secretion continues or increases, we must return to the application of nitrate of silver always with great caution, but without being alarmed by vain fears. These applications should be repeated every day or every other day; and in children at the commencement of the disease, I have sometimes repeated them twice in the same day.

At the same time as this energetic treatment is employed and repeated as often as the intensity of the symptoms require, and without waiting from one day to another, so as always to be behind the symptoms, which progress with such rapidity, we must not fail to act upon the intestinal canal, as much to keep it free, and thus diminish the causes of cephalic congestion as to benefit by a powerful revulsion. All the accessory treatment required by catarrhal ophthalmia in general, is applicable and ought not to be neglected.

Anti-gonorrhœal medicines, as copaiva, cubebs, &c. have no action on this disease, in whatever manner they may be administered. The same is the case with the anti-syphilitics, such as mercurials, &c.

## SECOND VARIETY.

## Gonorrhœa ani.

This is unquestionably the most rare of all the forms, yet it often occurs in women and little girls, in consequence of the discharge of gonorrhœal muco-pus flowing from the vulva. Gonorrhœal discharges from the anus also frequently accompany, or follow the development of chancres in this region, or are the more frequent consequence of an eruption of mucous tubercles.

In the acute stage, antiphlogistic treatment must be used, baths, emollient fomentations, repose, and care be taken to keep the bowels free. As soon as the inflammation is calmed, resolute fomentations with acetate of lead, or astringents with alum, often succeed. But a still more preferable medication is the application of solid nitrate of silver, to all parts that can be reached, or injections of it in solution in various doses, from one grain to six or more to the ounce of water; in these cases, the fluid should be injected into the rectum with a small urethra syringe.

We may say that as regards the anus and rectum, not only do co-paiva and cubebs seldom succeed, but they frequently only serve to maintain the disease by the irritation they cause at the lower extremity of the large intestine, of which many patients who use it in other cases complain.

## THIRD VARIETY.

## Gonorrhœal affection of the mouth, nose, &amp;c.

It is evident that all mucous membranes may be affected with gonorrhœa or gonorrhœal affections; but these affections are very rare, and their treatment when they do exist, requires nothing which has not already been indicated.

## SECTION III.—EXCRESCENCES, OR VEGETATIONS.

Excrescences, the forms of which vary greatly, do not seem, strictly speaking, to be the consequence of the syphilitic virus, as in the opinion of all good observers, and as may be seen every day, they are frequently developed under the influence of causes entirely unconnected with syphilis.

In the treatment of these excrescences, the following conditions must be considered; either there is only an hypertrophy of the tissues without epigenic increase, improperly ranged by some writers on syphilis amongst the vegetations and which constitute the morbid changes of structure, to which the name of condyloma is applied, or else there is an annual production of new tissues, vegetations properly so termed.

The treatment of condylomata is either that of indurated chancres or mucous tubercles.

When we have to do with true vegetations, either indurations depending on a chancre, of which they are then the consequence, or they have arisen on unindurated tissues. In the first case the specific induration must be removed, as directed when treating of indurated chancres, and then if they have not fallen off or withered during the treatment they must be excised. When there was no induration at the commencement, excision should at once be had recourse to, for which purpose the curved scissors will be found most convenient. The part should immediately afterwards be enveloped in compresses, moistened with cold water; rest and simple lotions till cicatrization will suffice to complete the cure. In some cases, the little wounds suppurating, they must be dressed either with a little simple cerate or aromatic wine. When the excision, which should embrace the whole thickness of the skin, or mucous membrane on which the vegetations are seated, is well made, cauterization is useless. But it would be otherwise in case of the existence of a chancre in the period of increase, as immediate cauterization would be requisite to prevent the inoculation of the fresh-made wounds. When however there are chancres still capable of inoculating, I prefer waiting till they are cicatrized before excising the vegetations.

We may undoubtedly destroy the excrescences by caustics alone, sometimes with nitrate of silver, but especially with liquid nitrate of mercury; but when they are provided with a foot-stalk, excision is far preferable; only in cases where the base is broad, or the patients fear the knife, I have recourse to these, or other means, opium paste, calomel, powdered savine, &c.

As regards the strictly speaking antisymphilitic treatment, it is only indicated where the concomitant symptoms require it.

#### SECTION IV.—PHIMOSIS AND PARAPHIMOSIS.

Phimosis is either complete or incomplete, permanent or temporary. The permanent may be congenial or acquired, it may exist with excess of length of the prepuce, with a prepuce not covering the whole of the glans, with excess of length of the frenum; there may be adhesions to the glans, either old or new, complete or incomplete. The temporary may be either inflammatory or œdematous, complicated with erysipelas, considerable tension, gangrene, balanitis, gonorrhœa, chancres, vegetations, herpes, perforations of the prepuce, difficulty of passing the urine, or complete retention. There may have existed a little narrowness of the margin before its development.

Temporary phimosis occurs in individuals who could previously easily uncover the glans, it easily yields without being operated.

Permanent phimosis, with too great a length of prepuce, or with indurations on the margin of this cutaneous covering, requires circumcision, if it be desired to cure one deformity by producing another.

When recent adhesions, easy to be destroyed, are present, they must be dissected; when they are too intimate, and especially too extensive, we must content ourselves with removing sufficient of the prepuce to uncover the meatus urinarius. When the frenum is too long, it should be resected; if vegetations be present, they must be removed; if there be chancres, unless there be urgent indications, we must wait till they are cured before operating, so as not to expose ourselves to the risk of increasing their extent, by inoculating the wound which results from the operation. If the operation be performed, the chancres still existing, they should if possible be removed at the same time. In this manner the whole disease, which may yet be only local, may be removed at once. At other times, if they be allowed to remain, immediate cauterization is necessary. When there are perforations of the prepuce, they ought to be removed in the operation.

If the prepuce is short, the section of the superior part according to the old method may suffice. If the prepuce is only straightened by the vegetations which are developed between it and the glans, a slight incision will suffice; otherwise the incision must be carried to the level of the base of the glans. It ought to be remembered, that after making the superior incision and removing the angles, a long strip of skin corresponding to the frenum remains, which constitutes a real deformity.

In some cases, I take a fold of the skin of a certain extent, and thus remove a flap, which leaves a division in the form of a V, with its basis on the margin of the prepuce, and its summit towards the base of the glans. But I prefer circumcision, and the following is the method I adopt.

The penis being relaxed without stretching the skin which forms the prepuce, I draw with ink a line which follows, in all its circumference, the oblique direction of the base of the glans and about an eighth of an inch from it. I next draw the prepuce forward, and fix it between the blades of a common dressing forceps, held by an assistant. The portion of the prepuce which projects beyond the forceps is to be held by the operator with his left hand, whilst with his right, he makes an incision with a bistoury, following the line traced with the ink. After the section, the mucous lining, which by its anatomical disposition does not allow of its being drawn forwards like the skin, remains entire and covers the glans; to avoid a secondary phimosis, or paraphimosis it should be immediately divided. I do this by dividing this mucous membrane by a single cut with the scissors on the dorsal surface of the glans to its base; then I remove the flaps around to the frenum, and with a single stroke, still holding the two flaps together, I remove the frenum with them. The cure is complete in twenty or five-and-twenty days, no deformity ever remains, nor is there any fear of a consecutive phimosis, or paraphimosis supervening.

After the operation, the artery of the frenum, or some of the prepuce branches often bleed considerably, they must, in these cases, either be tied or torsion applied. The penis must then be constantly

covered with cold water, to avoid erections and inflammation; to avoid erection, the patients should also have camphor, given in form of pills.

*Paraphimosis*, which is only a phimosis removed behind the glans, which it compresses, and thus producing all the symptoms which result from strangulation, requires that the parts should be again reduced to their normal position. When the constriction is but slight, it may be reduced by the common process. Should œdema exist, incisions must be made, so as to degorge the tissues before attempting the reduction. But whenever the strangulation is considerable, or there are ulcerations of the strangulating tissues, adhesions, inflammation of the glans, threatened or actual gangrene, and more especially when the paraphimosis has succeeded a phimosis, it would be absurd to persevere in reducing it, putting the patient to useless pain, and only substituting a phimosis for a paraphimosis, which would later have to be operated.

In this case, I make an incision with a straight bistoury on the dorsal side of the penis, which divides the whole skin; the mucous lining must also be divided in the same manner. The operation is in fact only the operation of phimosis, excepting the situation; the effects and after treatment are the same as in the preceding case.

# SPECIAL FORMULARY.

*Of the Medicaments used in my wards of the Hôpital des Vénériens.*

## I.—LOTIONS, FOMENTATIONS, LOCAL OR PARTIAL BATHS.

*Emollients*—Decoction of althæa.

*Sedatives*—Decoctions of althæa and poppy-heads.

*Narcotics*—Decoction of conium, solanum, and belladonna, to which may be added either laudanum or opium. I frequently use the following formula:—

Rp. Decoct. conii et solani. . . . . ℥ viii  
 Extract. gum. opii . . . . . gr. viii

*Solutio plumbi acetatis.*

Rp. Plumbi acet. crist. . . . . ℥ i  
 Aquæ destill . . . . . ℥ viii

For balanitis, lotions for the vulva and applications to leech-bites.

*Solutio opiata.*

Rp. Aquæ lactucæ . . . . . ℥ viii  
 Extr. gum. opii . . . . . ℥ i—ii

In gangrenous affections. When the irritability increases, the quantity of opium must sometimes be decreased.

*Solutio ammoniæ hydrochloratis.*

Rp. Aquæ . . . . . ℥ viii  
 Ammoniæ hydrochlor . . . . . ℥ ii

For resolute applications and fomentations, particularly applicable in the treatment of buboes.

*Tinctura opii diluta.*

Rp. Aquæ destill . . . . . ℥ iii  
 Tinc. iodinæ . . . . . ℥ i

The tincture may be increased to six drachms to the same quantity of water. It is employed in the treatment of buboes, hydrocele accompanying epididymitis, &c.

*Soda chlorinata diluta.*

Rp. Sodæ chlorin . . . . . ℥ ii  
 Aquæ . . . . . ℥ vi

The quantity of soda may be increased till a slight tingling sensation is produced. Used in the treatment of mucous tubercles, &c.

*Solutio hydrargyri bichloridi concentrata.*

Rp. Hydrarg. bichlor . . . . . gr. xx  
 Aquæ dest . . . . . ℥ i

For the cauterization of vesicated surfaces in the treatment of buboes.

*Vinum aromaticum, (Ph. Fr.)*

|     |                 |   |   |   |      |
|-----|-----------------|---|---|---|------|
| Rp. | Spec. aromat.*  | . | . | . | ℥ iv |
|     | Vin. rubr.      | . | . | . | ℔ ii |
|     | Spirat aromat.* | . | . | . | ℥ ii |

The species to be macerated eight days in the wine then expressed and strained, and the spirit added to it.

To the above preparations I add, if it be required to be still more astringent, two scruples of tannic acid, to eight ounces of the wine.

*Vinum aromaticum, c. opio.*

|     |                |   |   |   |        |
|-----|----------------|---|---|---|--------|
| Rp. | Vin. aromat.   | . | . | . | ℥ viii |
|     | Ext. gum. opii | . | . | . | ℥ ss   |

The foregoing preparations of wine are employed as dressing for chancres and ulcers.

## II.—INJECTIONS.

The emollient, sedative, and narcotic injections, consist of the same liquids as those mentioned above for lotions.

*Injectio plumbi acetatis pro urethra.*

|     |                     |   |   |   |      |
|-----|---------------------|---|---|---|------|
| Rp. | Aquæ rosar.         | . | . | . | ℥ vi |
|     | Plumb. acet. crist. | . | . | . | ℔ ii |

*Idem pro vagina.*

|     |                     |   |   |   |           |
|-----|---------------------|---|---|---|-----------|
| Rp. | Aquæ                | . | . | . | ℔ ii      |
|     | Plumb. acet. crist. | . | . | . | ℥ iii—℥ i |

Gradually increased.

*Injectio sulphatis aluminis et potassæ pro urethra.*

|     |                         |   |   |   |           |
|-----|-------------------------|---|---|---|-----------|
| Rp. | Aquæ rosar.             | . | . | . | ℥ vi      |
|     | Alum. et potass. sulph. | . | . | . | gr. xviii |

*Idem pro vagina.*

|     |                         |   |   |   |       |
|-----|-------------------------|---|---|---|-------|
| Rp. | Aquæ                    | . | . | . | ℔ ii  |
|     | Alum. et potass. sulph. | . | . | . | ℥ iii |

*Injectio c. vino pro urethra.*

|     |             |   |   |   |      |
|-----|-------------|---|---|---|------|
| Rp. | Aquæ rosar. | . | . | . | ℥ iv |
|     | Vin. rubr.  | . | . | . | ℥ ii |

The quantity of wine may be increased, and if it does not cause any irritation, it may afterwards be used alone.

*Idem c. acido tannico.*

|     |               |   |   |   |           |
|-----|---------------|---|---|---|-----------|
| Rp. | Vin. rubr.    | . | . | . | ℥ vi      |
|     | Acid. tannic. | . | . | . | gr. xviii |

Where used for the vagina, the quantity of the tannic acid should be doubled and gradually increased, according to the effects produced.

*Injectio zinci sulphurici.*

|     |             |   |   |   |        |
|-----|-------------|---|---|---|--------|
| Rp. | Aquæ rosar. | . | . | . | ℥ viii |
|     | Zinc. sulph | . | . | . | ℔ i    |

to which a scruple of laudanum may be added.

*Injectio argenti nitrici.*

|     |                      |   |   |   |        |
|-----|----------------------|---|---|---|--------|
| Rp. | Aquæ dest.           | . | . | . | ℥ viii |
|     | Argent. nitr. crist. | . | . | . | gr. ii |

The nitrate of silver may be increased, till a favorable result be obtained, if irritation be not produced.

If a caustic solution be required:—

|     |               |   |   |   |       |
|-----|---------------|---|---|---|-------|
| Rp. | Aquæ dest.    | . | . | . | ℥ i   |
|     | Argent. nitr. | . | . | . | gr. x |

\* Both the above preparations contain a host of articles. I have found the *Sp. rosmarinæ* or *Sp. lavend. co.* an excellent substitute for them. H. D.

*Injectio ferri iodidi.*

|     |              |   |   |   |        |
|-----|--------------|---|---|---|--------|
| Rp. | Aquæ dest.   | . | . | . | ℥ vi   |
|     | Ferri iodid. | . | . | . | gr.iii |

The quantity may be increased to nine grains to the ounce of water, but care is required to avoid irritation.

## III.—COLLYRIA.

For emollient sedative, or narcotic collyria, the fluids must be used as mentioned under No. I.

*C. zinci.*

|     |                                 |   |   |   |        |
|-----|---------------------------------|---|---|---|--------|
| Rp. | Aquæ rosar.                     | . | . | . | ℥ iii  |
|     | Zinci sulph                     | . | . | . | gr.vi  |
|     | To which may be added Tr. opii. | . | . | . | gtt.xx |

*C. argenti nitrici.*

|     |               |   |   |   |        |
|-----|---------------|---|---|---|--------|
| Rp. | Aquæ dest.    | . | . | . | ℥ iii  |
|     | Argent. nitr. | . | . | . | gr.iii |

## IV.—GARGARISMATA.

The emollient, sedative, and narcotic gargles are prepared in the same manner as the fomentations, &c.

*G. c. hydrarg. bichlor.*

|     |                         |   |   |   |            |
|-----|-------------------------|---|---|---|------------|
| Rp. | Decoct. conii et solani | . | . | . | ℥ viii     |
|     | Hydrarg. bichlor.       | . | . | . | gr.ii—viii |

This is used in case of ulcerations of the throat, after the acute period.

*G. aluminis et potass. sulph.*

|     |                         |   |   |   |       |
|-----|-------------------------|---|---|---|-------|
| Rp. | Aquæ lactuc.            | . | . | . | ℥ vii |
|     | Alum. et potass. sulph. | . | . | . | ℥ i   |
|     | Mel. rosat.             | . | . | . | ℥ i   |

In cases of apathous affections and mercurial stomatitis, without too great inflammation.

*G. cinchonix.*

|     |                      |   |   |   |       |
|-----|----------------------|---|---|---|-------|
| Rp. | Cort. cinchon. rubr. | . | . | . | ℥ ii  |
|     | Aquæ                 | . | . | . | ℥ xii |

Boil to ℥ viii, to this when strained, add extr. opii gr.viii, in cases of gangrene; or ℥ ii tinct. cochleariæ, should there be a scorbutic tendency, or permanent ramollissement of the gums.

*G. c. acidio hydrochlorico.*

|     |                         |   |   |   |        |
|-----|-------------------------|---|---|---|--------|
| Rp. | Aquæ lactucæ            | . | . | . | ℥ vii  |
|     | Acid. hydrochlor. fort. | . | . | . | gtt.xx |
|     | Mel. rosat.             | . | . | . | ℥ i    |

In aphthous affections and mercurial stomatitis.

To combat mercurial salivation, I prefer applying acid. hydrochlor. fort. to the gums and tongue when they are ulcerated, repeating the application every day, or every other day. The bleeding of the surface ought not to be an obstacle. The acute pain it produces, soon ceases, and nothing equals its beneficial effects. Of course the peculiar indications which may present themselves, must not be neglected.

## V.—CERATES, &amp;c.

*Unguent opiatum.*

|     |           |   |   |   |     |
|-----|-----------|---|---|---|-----|
| Rp. | Axung.    | . | . | . | ℔ i |
|     | Tr. Opii. | . | . | . | ℥ i |

*C. plumbi.*

|     |                    |   |   |   |     |
|-----|--------------------|---|---|---|-----|
| Rp. | Cerat              | . | . | . | ℥ i |
|     | Liq plumb. diacet. | . | . | . |     |

*Unguent hydrarg. opiat.*

|     |                 |    |     |
|-----|-----------------|----|-----|
| Rp. | Unguent. opiat. |    |     |
|     | Ung. hydrarg.   | aa | ℥ i |

Used in cases where the mercurial ointment is too irritating.

*Unguentum digestivum.*

|     |                |  |      |
|-----|----------------|--|------|
| Rp. | Ol. terebinthe |  | ℥ i  |
|     | Vitel. ovi.    |  | ii   |
|     | Ol. hyperic.   |  | ℥ ss |

*Unguent hydrarg. chlorid.*

|     |                   |  |        |
|-----|-------------------|--|--------|
| Rp. | Hydrarg. chlorid. |  | gr. vi |
|     | Cerat. opiat.     |  | ℥ ii   |

*Unguent belladonnæ.*

|     |                 |  |      |
|-----|-----------------|--|------|
| Rp. | Extr. belladon. |  | ℥ ss |
|     | Axung.          |  | ℥ i  |

*U. Hydrarg. ioidid.*

|     |                  |  |     |
|-----|------------------|--|-----|
| Rp. | Hydrarg. ioidid. |  | ℥ i |
|     | Axung.           |  | ℥ i |

The quantity of the iodide may be increased to two drachms, if too great irritation be not produced.

*Mel. iodadum.*

|     |                  |  |       |
|-----|------------------|--|-------|
| Rp. | Mel.             |  | ℥ iss |
|     | Hydrarg. ioidid. |  | ℥ i   |

*Unguentum. potass. hydriod.*

|     |                  |  |      |
|-----|------------------|--|------|
| Rp. | Potass. hydriod. |  | ℥ ss |
|     | Axung.           |  | ℥ i  |

If to the above be added two grains of iodine, it forms the unguent potass. hydriodid. iodatum. The unguent. plumb. iodat. is formed in the same manner as the ung. potass. hydriod.

## VI.—EMPLASTRA.

*Emplastrum. c. hydrarg (de Vigo)* according to the codex.\*

*Emplastre. conii. c. plumb. ioidid.*

|     |                |  |     |
|-----|----------------|--|-----|
| Rp. | Emp. conii.    |  | ℥ i |
|     | Plumb. ioidid. |  | ℥ i |

This is used in the treatment of buboes, and especially in chronic engorgements of the testicles. If twenty grains of antim. et potass. tart. be sprinkled upon a plaster of emplastre. conii of the size of the hand, it forms an excellent excitant where the buboes are indolent.

## VII.—CATAPLASMATA.

Of linseed meal, bread, rice, oatmeal, made with water, or the narcotic decoctions.

They are rendered resolutive by using them cold, and adding the decoctum album, or a solution of sal ammoniac; or narcotic and sedative, by adding laudanum.

\* *Emplatre de Vigo. c. mercurio* consists of

|                 |         |                 |       |
|-----------------|---------|-----------------|-------|
| Emplast. simpl. | ℔ iiss  | Myrrhæ          | ℥ v   |
| Ceræ pur.       |         | Pulvis croci    | ℥ iii |
| Resinæ          | aa ℥ ii | Hydrarg.        | ℥ xii |
| Gum. ammon.     |         | Ol. terebinth.  | ℥ ii  |
| Bdellii         |         | Styracis liquid | ℥ vi  |
| Olibani         | aa ℥ v  | Ol. lavend.     | ℥ ii  |

For this I substitute the emplastr. ammoniac. c. hydrarg.—P. L. H. D.

## VIII.—ENEMATA.

| <i>E. c. copaiva.</i> |                     |         |  |
|-----------------------|---------------------|---------|--|
| Rp.                   | Ol. copaivæ . . . . | 3 ii—vi |  |
|                       | Vitel. ovi . . . .  | i       |  |
|                       | Ext. opii . . . .   | gr. i   |  |
|                       | Aquæ . . . .        | ℥ vi    |  |

Given in cases in which the copaiva cannot be administered by the mouth.

| <i>E. c. camphora et opio.</i> |                    |       |  |
|--------------------------------|--------------------|-------|--|
| Rp.                            | Camphoræ . . . .   | gr. x |  |
|                                | Ext. opii . . . .  | gr. i |  |
|                                | Vitel. ovi . . . . | i     |  |
|                                | Aquæ . . . .       | ℥ vi  |  |

To prevent the erections, when the pills do not succeed.

## IX.—ESCHAROTICA.

Vienna paste is formed by adding to six parts of caustic potass, five of quick lime. When required for use, it should be made into a paste, by adding a sufficient quantity of alcohol.

## X.—BATHS.

Gelatinous baths are made by adding from one to two pounds of glue; alkaline baths by the same quantity of subcarbonate of potass. If sublimate be used, half an ounce should be added to the usual quantity of water, increasing to two or even three ounces, according to the effects produced.

## XI.—PILULÆ.

| <i>P. hydrarg. bichlor. co. (Dupuytren.)</i> |                           |                  |  |
|----------------------------------------------|---------------------------|------------------|--|
| Rp.                                          | Hydrarg. bichlorid. . . . | gr. 1-5th—1-4th. |  |
|                                              | Ext. aquos. opii . . . .  | gr. 1-4th—1-half |  |
|                                              | Resin. gualaci. . . .     | gr. iv           |  |

| <i>P. hydrarg. iodid.</i> |                       |        |      |
|---------------------------|-----------------------|--------|------|
| Rp.                       | Hydrarg. iodid. . . . |        |      |
| Extr.                     | lactucæ . . . .       | aa     | ℥ ss |
| "                         | gum. opii . . . .     | gr. ix |      |
| "                         | gualaci . . . .       | ℥ i    |      |

To be made into 36 pills.

In cases of inveterate affections, accompanied with much induration of the tissues, two or three grains of the pulvis fol. conii may be added.

These are to be taken at night, four or five hours after the last meal; when the dose is increased, they may be taken night and morning.

| <i>P. hydrarg. chlorid. com.</i> |                          |     |      |
|----------------------------------|--------------------------|-----|------|
| Rp.                              | Dydrarg. Chlorid. . . .  | ℥ i |      |
|                                  | Pulv. fol. conii . . . . |     |      |
|                                  | Sapon. castil. . . .     | aa  | ℥ ii |

To be made into 24 pills.

These pills are employed in the treatment of the engorgements which remain after a gonorrhœal epididymitis, commencing with one and increasing every five days to the number of six, unless the symptoms of mercurialization occur, and then require the number to be diminished, or their use to be entirely suspended.

| <i>P. opii c. camphora.</i> |                        |          |  |
|-----------------------------|------------------------|----------|--|
| Rp.                         | Camph. . . .           | ℥ ii     |  |
|                             | Extr. gum. opii. . . . | gr. viii |  |
|                             | Mucilag. q. s. . . .   |          |  |

To be made into 16 pills.

Given in doses of 2 to 3 every evening, to allay the irritation in the neck of the bladder and the erections.

## XII.—LIQUOR VAN. SWIETENII.

|     |                     |   |   |   |         |
|-----|---------------------|---|---|---|---------|
| Rp. | Hydrarg. bichlorid. | . | . | . | gr.viii |
|     | Sp. vini. rect.     | . | . | . | iss     |
|     | Aquæ dest           | . | . | . | ℥xivss  |

One ounce contains half a grain of sublimate. The dose is two drachms per diem, increased to four. To be taken in three or four times at intervals of four to six hours, so as not to interfere with the meals. It may be given in milk or any mucilaginous drink, to which may be added, a small quantity of syrupus papaveris, if it cause pain in the stomach or intestines.

## XIII.—TISANES. DIET DRINKS.

T. of sarsaparilla and guaicum, similar to the decoction or infusion.

*Tisane de Feltz.*

|     |                   |   |   |   |        |
|-----|-------------------|---|---|---|--------|
| Rp. | Rad. sarzæ incis. | . | . | . | ℥iii   |
|     | Gum. arab.        | . | . | . | ss—℥ii |
|     | Antim. sulph.*    | . | . | . | iv     |
|     | Aquæ              | . | . | . | ℥vi    |

Boil to half. Three or four wine glasses a day, carefully observing the susceptibilities of the patient. This treatment must be continued for five or six months, seldom less than two.

The patient's food should consist of roast or boiled meat, and vegetables cooked without salt, to avoid the decomposition of the antimomy, (if, as has been doubted, the decoction holds any of it in solution.)

*Decoctum Zittmanni.*

## No. 1.

|     |                 |   |   |   |       |
|-----|-----------------|---|---|---|-------|
| Rp. | Rad. sarzæ      | . | . | . | ℥xii  |
|     | Aquæ            | . | . | . | ℥ii   |
|     | Sacchr. alumin. | . | . | . | iss   |
|     | Hydrarg. chlor. | . | . | . | ss    |
|     | Cinnabaris      | . | . | . | i     |
|     | Fol. sennæ      | . | . | . | ℥iii  |
|     | Rad. glycyrrh.  | . | . | . | ℥iss  |
|     | Sem. anisi.     | . | . | . |       |
|     | Sem. feniculi.  | . | . | . | aa ℥x |

The sarsaparilla and water should be boiled together a quarter of an hour, and then the sacchr. alumin. calomel and cinabar added, enclosed in a linen bag and all boiled down one third. The other ingredients being added and allowed to stand a short time, it should be strained for use.

This is termed the strong decoction.

The weaker is made as follows:—

## No. 2.

To the residuum of No. 1, add—

|            |   |   |   |       |
|------------|---|---|---|-------|
| Rad. sarzæ | . | . | . | ℥ii   |
| Aquæ       | . | . | . | ℥xxiv |

Boil and add—

|                     |         |
|---------------------|---------|
| Cort. Citr.         |         |
| Cort. cannell.      |         |
| Sem. cardam. minor. |         |
| Rad. glycyrrh       | aa ℥iii |

On the first day, the patient must take a purgative; each morning he is to take half a pint of No. 1, to be drank warm, and keep his bed. In the afternoon, a pint of the No. 2. And again, half a pint of No. 1 in the evening, the two latter doses to be taken cold. This to be continued for four days, on the fifth, a purgative, the treatment then to be

\* Enclosed in a bit of cloth.

repeated, and again followed by a purgative. If then after an interval of a week it be required, the foregoing treatment must be repeated.

The decoct. alb. frequently referred to is given thus, in the codex Phar. franc.

|     |                                        |        |
|-----|----------------------------------------|--------|
| Rp. | Phosph. calcici, (cornu. ustum. P. L.) | ℥ ii   |
|     | Medullæ panis . . . . .                | ℥ vi   |
|     | Gum. arab. . . . .                     | ℥ ii   |
|     | Sacchr. alb. . . . .                   | ℥ i    |
|     | Aquæ simpl. . . . .                    | ℥ xxii |

Mix well in a mortar, boil altogether half an hour in a covered vessel. This will yield a pint of the decoction.

This is used externally, and also internally as a vehicle.

#### XIV.—SYRUPI.

##### *S. sudorificus.*

|     |                        |         |
|-----|------------------------|---------|
| Rp. | Rad. sorzæ             |         |
|     | Lig. guaiaci . . . . . | aa ℥ vi |
|     | Aquæ . . . . .         | ℔ iv    |

Macerate twenty-four hours, then gently boil down to half, express and add from one to two pounds of lump sugar.

The dose is from 2 to 4 ounces per diem.

##### *S. sarzæ. co. (de Cuisinier.)*

|     |                      |        |
|-----|----------------------|--------|
| Rp. | Rad. sarzæ . . . . . | ℥ xxx  |
|     | Aquæ . . . . .       | ℔ xxiv |

Infuse for 24 hours, and then boil down to ℔ viii. Repeat this operation three times. Strain and mix these three decoctions, then add—

Flor. borag. off.

” rosar. alb.

|                      |         |
|----------------------|---------|
| Sem. anis. . . . .   | aa ℥ ii |
| Fol. sennæ . . . . . | ℥ iss   |

Boil this down to half; strain and add—

Sacchr. alb. et mel. . . . . aa ℔ ii

Two to four ounces may be given per diem. It is suitable for patients who are subject to constipation. When it purges gently, it may be advantageous, but when it gripes or produces diarrhœa, its use must be suspended.

To the foregoing syrups may be added mercurial preparations and particularly sublimate. I prefer the cyanide of mercury, 4 grains to the pound, which is less liable to be decomposed,

A drachm should be given night and morning, gradually increasing to half an ounce per diem. Should it purge, I combine with it the sudorific syrup, to whom I add 8 grains of extr. opii to the pound.

##### *Syrupus ferri iodid.*

|     |                            |     |
|-----|----------------------------|-----|
| Rp. | Syrupi sudorific . . . . . | ℔ i |
|     | Ferri iodid . . . . .      | ℥ i |

Dose: 2—6 drachms per diem.

##### *S. ferri et ratanhæ.*

|     |                            |         |
|-----|----------------------------|---------|
| Rp. | Syr. tolutan. . . . .      | ℔ i     |
|     | Ferri sesquicarb. . . . .  |         |
|     | Extract. ratanhæ . . . . . | aa ℥ ii |

Dose: 4—6 drachms per diem used in gonorrhœa and mucous discharges.

##### *S. calmans.*

|     |                      |       |
|-----|----------------------|-------|
| Rp. | Syr. papav . . . . . | ℥ iv  |
|     | ” amygdal. . . . .   | ℥ xiv |

To this syrup may be added, two drachms of the nitrate of potass: to be given during the acute stage of gonorrhœa, in linseed tea or water.

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In the getting up of this very complete work, the publishers have spared neither pains nor expense, and they now present it to the profession, with the full confidence that it will be deemed all that is wanted in a scientific and artistic point of view, while, at the same time, its very low price places it within the reach of all.

It is particularly adapted to supply the place of skeletons or subjects, as the profession will see by examining the list of plates now annexed.

"These figures are well selected, and present a complete and accurate representation of that wonderful fabric, the human body. The plan of this Atlas, which renders it so peculiarly convenient for the student, and its superb artistic execution, have been already pointed out. We must congratulate the student upon the completion of this atlas, as it is the most convenient work of the kind that has yet appeared; and, we must add, the very beautiful manner in which it is 'got up' is so creditable to the country as to be flattering to our national pride."—*American Medical Journal*.

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"It has been the aim of the author of the Atlas to comprise in it the valuable points of all previous works, to embrace the latest microscopical observations on the anatomy of the tissues, and by placing it at a moderate price to enable all to acquire it who may need its assistance in the dissecting or operating room, or other field of practice."—*Western Journal of Med. and Surgery*.

"These numbers complete the series of this beautiful work, which fully merits the praise bestowed upon the earlier numbers. We regard all the engravings as possessing an accuracy only equalled by their beauty, and cordially recommend the work to all engaged in the study of anatomy."—*New York Journal of Medicine and Surgery*.

"A more elegant work than the one before us could not easily be placed by a physician upon the table of his student."—*Western Journal of Medicine and Surgery*.

"We were much pleased with Part I, but the Second Part gratifies us still more, both as regards the attractive nature of the subject, (The Dermoid and Muscular Systems,) and the beautiful artistic execution of the illustrations. We have here delineated the most accurate microscopic views of some of the tissues, as, for instance, the cellular and adipose tissues, the epidermis, rete mucosum and cutis vera, the sebaceous and perspiratory organs of the skin, the perspiratory glands and hairs of the skin, and the hair and nails. Then follows the general anatomy of the muscles, and, lastly, their separate delineations. We would recommend this Anatomical Atlas to our readers in the very strongest terms."—*New York Journal of Medicine and Surgery*.

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EMBRACING

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VIEW OF CUVIER'S ANATOMICAL THEATRE, . . . . . vignette

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
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
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